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ABSTRACT

Profound changes in our socioeconomic structure seem to question the relevance of both "institutional" as well as "open school" forms of education. The educator is faced with the challenge of selecting a model, combining models, or devising a new one. Dealing with these fundamental questions, 10 articles have been selected for their potential value in helping the professional development of those engaged in the BTSD (Basic Training for Skill Development) and related programs: The Vocational Adult Secondary Training (VAST) Project--An Adventure in Student-Centered Learning (Frank Dolman); A Multi-Media Adult Education System in Quebec: A Dream Comes True (Gilles Provost); Motivating Adult Basic Education (ABE) Students to Read and Write (L. L. Feinstein); Education and Future Shock (Antoine Baby); Practice Sessions in Nonskill Courses--Techniques for Teachers of Adults; Recurrent Education--A Solution to the Crisis of Education? (J. R. Gass); Adult Basic Education and BTSD (K. Lynn); Science Program Development in Newfoundland and Labrador (A. Germani); Client Follow-Up (R. F. Gaffney). (Author/MW)

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B.T.S.D. REVIEW

Basic Training for Skill Development

Issued by the Occupational & Training Analysis & Development Branch, Strategic Planning and Research Division, Department of Manpower and Immigration, Ottawa, for those engaged in the Basic Training for Skill Development and related Programs.

Manpower and Immigration
Robert Andras, Minister

Main-d'œuvre et Immigration
Robert Andras, Ministre

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The articles in this periodical have been selected for their potential value in helping the professional development of those engaged in the BTSD and related programs. The Department of Manpower and Immigration, however, does not necessarily support or encourage the views and opinions expressed in them.

to have great relevance to the adult returning to school.

The foundations of our educational systems are being profoundly shaken by the changes in our traditional socio-economic milieu. Both at the theoretical and practical levels, educators are seeking viable formulas that can encompass the new elements of modern society. Innovations such as recurrent education, individualized instruction, and activity methods can be very promising if, according to Lynn, they make it possible to broaden the scope of educational objectives for the learning adult.

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EDITORIAL

The socio-economic changes of the past few decades have greatly influenced the search for new objectives and forms in education. Today the educator is again asking himself what are his objectives, and while the questions have not changed, the answers are taking a different slant.

Without wishing to oversimplify, we can state that the educational process moves between two extremeties: educating to help the individual fit into the socio-economic milieu, and educating to develop all his faculties. Although these are two extremes, they are not contradictory, but in fact, they seem complementary.

In practice, these dual objectives have apparently crystallized in two forms of education: 1) the "institutional" kind, with compulsory curriculum and formal classes, and 2) the "open school" and its activity methods, whereby the learner selects his program and course objectives.

One may well ask whether the profound changes in our socio-economic structure do not question the relevance of these two forms of education. Must the educator select one model, and one model only? Should he strive for a happy medium or should he devise a new educational model?

The answers to these fundamental questions are indeed complex and constitute a challenge that many educators are eager to take up. Some of their views are presented in the articles of this issue.

An article by Baby, "Future Shock in Education", introduces a new element in response to the problem facing the modern educator. The author reviews the main themes of Toffler's book "Future Shock" and concludes that instead of trying to adapt the individual to a specific situation, education should concentrate on developing that individual's adaptability.

Chippindale and Gass discuss a form of education with endless possibilities for the basic education of adults: recurrent education. It is closely related to continuing education, but with a difference. Recurrent education wants to avoid the drawbacks of long absences from the adult's job environment, and demands "recognition for the complementary roles of occupational training and more general human development."

The article by Provost shows us another path in the search for educational modes and objectives: active participation of the community in the educational process. The Multimédia project, launched in Montreal in 1971, gives the person who is involved in adult education a great deal to think about.

In the classroom, the need for new didactic models is also making itself felt. Some very interesting research is in progress which is the result of combined philosophical and practical educational models.

In their articles, Dolman and Germani discuss programs which have used innovative approaches to teaching communications and science respectively. Both of these appear

THE VAST PROJECT - AN ADVENTURE IN STUDENT-CENTERED LEARNING

Frank Dolman

Director, VAST Project

The Vocational Adult Secondary Training (VAST) Project conducted in Burnaby, B.C. is described by its director. Its main objective was to apply and evaluate some of the the methodology in student-centered learning that had been developed in various Canada Newstart Corporations.

Objectives

The Vocational Adult Secondary Training (VAST) Project was proposed in response to an invitation by the Department of Manpower and Immigration in 1972 to assist British Columbia in applying some of the methodology of Adult Basic Education that had been developed by the various Newstart Corporations across Canada. The B.C. Department of Education accepted the opportunity to adapt new methodologies and materials and to further extend research and development in Adult Basic Education in the province.

The Director and a staff of three teachers and one secretary began work in September 1972 on the research and development phase of the project. In November an additional typist was added to the staff. The experimental group of two classes of students began in January 1973, and a control group of comparable students was selected from the regular BTSD classes at the B.C. Vocational School in Burnaby.

The objectives of the project were to:

(i) pre-test students to determine their academic level of functioning;

(ii) have students select required units of work from a modular curriculum guided by the results of pre-testing, vocational goals, and individual capabilities;

(iii) have students proceed through the program at their own rate;

(iv) integrate Life Skills into the Science and Communications parts of the program.

The staff also introduced some additional factors in methodology during the research and development stage of the project. These factors reflected our philosophy that a course of this nature should be student centered, and should attempt to meet the social and learning needs of the disadvantaged student. Methodologies developed towards these ends included:

(i) having students plan and schedule their own studies;

(ii) requiring a student to learn how to work effectively as a member of a small group;

(iii) having a student participate actively in large group activities

(iv) having students participate actively in classroom and school management decisions;

(v) permitting students to enter

and complete the program at times best suited to their individual requirements.

The underlying philosophy of the VAST program was dictated by the needs of its clientele, sometimes at the cost of introducing administrative and instructional difficulties. To assess the needs of the client group, the VAST staff engaged in considerable research. The findings and their implications on design and philosophy are discussed below.

One of the most obvious characteristics of the BTSD client group would seem to be lack of homogeneity. The course attracts people of extremely diverse ages, abilities, backgrounds and ambitions. This has clear implications for curriculum design. The ideal approach would be to design a course for the specific needs of each individual student, and where possible, this is what the VAST program seeks to do. A significant part of the course content is optional and need not be taken for certification. The optional units are designed to aid the student in the pursuit of his or her chosen career. The student selects these on the basis of his future plans and in consultation with his counsellor and instructor. Such a flexible approach to curriculum design meant that the VAST program would have to adopt individualized learning procedures which would allow each student to select a program and to move at a rate best suited to his experience and background.

It was felt that the requirements of the student would best be met if he were able to enter the program when he wished. In addition, a program with a flexible intake is more responsive to employment fluctuations. These factors dictated the development of a program which could accept new students on a daily basis.

Course content was determined by the demands of the occupations and vocational courses towards which the client group was aspiring. Since this is a widely used approach to content selection in BTSD course design, the content of the VAST program does not differ greatly from that of other programs. An exception, however, was made in the Life Skills area, since it was observed that most students taking BTSD in British Columbia do not seek further vocational training. With this in mind, the VAST program includes career planning and "Creative Job Search" training.

The main reason for the inclusion of Life Skills learning is the observation that the client group often has negative social attitudes. Some research indicates that it have "...a lack of self-confidence, low self-esteem, and a high degree of dependency." Other studies have shown poor attitudes to work, difficulty in adjusting to change, low level of social co-operation, and low motivation. To meet the challenges of this type of social education, the VAST program had to seek new techniques since "...even an individual's seemingly personal opinions and attitudes may be byproducts of interpersonal relations. The evidence strongly suggests that opinions and attitudes are often maintained, sometimes generated, sometimes merely enforced in conjunction with others." If so, "...then a change in these ideas (opinions and attitudes) obviously cannot be a purely individual matter..."[1] With these factors in mind the VAST program includes a significant portion of group learning, one objective of which is to build more positive attitudes. An

example of this is in Science, where students must form a cohesive and co-operative group in order to progress through the course. In this group they discuss and learn their science objectives, and in the process are compelled to learn to work together.

Research also clearly indicates that the adult learner is much more interested and motivated if he plays a positive role in the planning of his own course of study. The VAST student not only starts the course when he wants, selects the options he needs, goes at his own rate, and terminates when he chooses, but also lays out each week's work in advance, and keeps a record of his daily progress on a planning sheet. In addition to this, the student participates in discussions of classroom management. Thus students are actively involved in planning their own future, which in itself is valuable training and a positive motivation.

Structure of Courses

The Mathematics and Communications programs are invididualized so that most work is done independently, although at times students find it advantageous to work together. The students work through the program in the sequence indicated on the VAST flow chart (Figure 1). Each course consists of a number of units of study, and these are either "diagnosed" or "prescribed." Mathematics and Communications uses both types of unit, but Science, which is studied in groups, uses only the latter.

A diagnosed unit begins with a diagnostic test, which determines the student's knowledge and skills in a certain limited area. The degree of knowledge and skill required is spelled out precisely in a number of behavioural objectives. After the test results are evaluated by the instructor, the student will begin a number of learning activities related directly to the objectives. These activities are described in detail on learning activity sheets which guide the student to the required resources and correct learning procedures. Upon completion of some or all of the learning activities, a student writes an item progress check, and if successful, continues on to other topics. The number and nature of the student learning activities are determined by the results of the diagnostic test. If it indicates that no study is required, the student writes the diagnostic test for the next unit of work.

The second type, or prescribed unit, has no diagnostic test, and deals with work that BTSD students are usually not familiar with, such as chemistry or critical reading. Here the student begins directly with a learning activities sheet which outlines the work required for the first item. On completion of the assignments, an item progress check measures the learning, and the successful student goes on to the next item, and so on, working through the entire unit. This type of prescribed unit, without a diagnostic test, was adopted by the project staff when we observed the frustration, and even anguish, exhibited by students when faced with a diagnostic test which they simply could not do. Frequently students would attempt to study on their own in preparation for these tests--which of course destroys the validity of a diagnostic test! Removing the test seemed to remove a threat, and provide for more effective learning.

Science and Oral Communications differ from the other components of the program in that they are designed for students working in groups. For many students this was a new and different learning experience, and frequently all the skill and resources of an instructor were necessary to help individuals cope successfully with the new situation. Many specific suggestions for instructors on setting up and maintaining effective groups are outlined in the VAST Instructor's Manual. The role of the instructor becomes critical when a group ceases to function effectively, or when a student announces that he or she "...can't work with the group..." These situations were handled as class problems (rather than those of the instructor!). A class meeting was held as soon as possible, and the entire situation, with its causes, effects, and possible solutions, was discussed quietly and rationally by the group. The instructor acted as a moderator and guide, but not as a decision maker. In every case during the VAST project classes, an acceptable solution was found, and not infrequently members of the class expressed satisfaction at having participated. These discussions formed an important part of the Oral Communications program.

One of the unique features of the VAST program is the use of a planning period and a planning sheet--a feature that involves the student in the creation of his own individual program. Time is set aside each week for the students to plan exactly what they will do for the following week. After estimating when they can complete the entire course, the students budget their time and work towards that goal. As well as planning how many items and units of work will be accomplished during any one week, the student must arrange for meetings with his Science group for discussions, labs or tests. The entire class must also decide when group activities can be scheduled. All this planning is recorded on the student's planning sheet, which guides his work throughout the week. As he finishes each scheduled piece of work, he records this on the planning sheet. When the next planning session arrives, the student examines the work done on the old sheet and plans his next week's work. The old planning sheet, complete with a record of the previous week's work, is placed in the student's personal file.

The planning sheet not only organizes the student's time, but also gives him positive motivation by breaking the course down into manageable tasks for each week. It helps the student assess his own capability and also to design a realistic plan and carry it out successfully. Program planning was a skill that students had to learn--we found that it took from three to six weeks for most, while a few were never able to develop a workable plan and carry it to completion without some help from the instructor. Individual planning led to individualized programming--for example, foreign-born students tended to spend up to 75 per cent of their time doing work in English, while older Canadian-born students often spent most of their time studying Arithmetic--each concentrated on what he needed.

Most other aspects of classroom management were also left in the hands of the group--seating arrangements, coffee breaks, lunch hour, homework assignments, smoking rules, and so on. The only "house rules" were that a student was expected to arrive on time and apply himself to his learning tasks while in class.

Conclusion

There are many aspects of the VAST project that cannot be discussed in an article of this nature. Specifics dealing with the control group, with continuous intake and exit, with equipment and materials, the Student Manual, and the Instructor's Manual, together make up a report as large as this issue of the BTSD Review. However, several interesting observations were drawn from statistical data on the project. The standardized Test of Adult Basic Education (T.A.B.E.) was used as the test of educational achievement and was administered to both the demonstration and control classes at the beginning and at the end of the course. Based on the results it was calculated that the mean gain in terms of days per grade was better for the demonstration group, i.e. they took fewer days to gain one grade. This means that the project group achieved a similar academic gain in significantly less time than the comparison group. Another observation is that the project drop-out rate was about half that of the control group. In addition, the project was able to utilize the 36 places purchased by Canada Manpower for 63 students; this could, in the long run, result in a significant reduction in the cost of BTSD.[2]

The British Columbia Department of Education is currently operating phase II of the VAST project. The purpose essentially is to further test and refine the materials and techniques devised in phase I, with II experimental classes located throughout the province. Before beginning the phase II classes, the instructors involved were brought together for a week of discussion and pre-service training. At the conclusion of classes, it is planned to get the instructors together again for a longer period of time for evaluation and improvement of the VAST project materials. It is felt that these projects can contribute significantly to BTSD in British Columbia, and will possibly stimulate further development elsewhere in Canada.

NOTES

[1] Niemi, J. and Anderson, D. *Adult Education and the Disadvantaged Adult*, Syracuse, N.Y., ERIC Clearinghouse, 1969.

[2] Copies of the *Final Report, VAST Development Project, Phase I* may be obtained from Mr. Derek Knox, Co-Ordinator, VAST Project, Curriculum Development Branch, 3600 Willingdon Avenue, Burnaby 2, British Columbia.

Figure I

VAST FLOW CHART

CORE

UNIT	I Whole Numbers						II Fractions						III Ratio			IV Decimals			V Percent				VI Consumer Math						VII Measurement				
ITEM	A	B	C	D	E	F	A	B	C	D	E	F	A	B	C	A	B	C	D	E	A	B	C	D	A	B	C	D	E	F	A	B	C	D	E
MATHEMATICS	READING & WRITING	ADDITION	SUBTRACTION	MULTIPLICATION	DIVISION	PROBLEM SOLVING	READING & WRITING	ADDITION	SUBTRACTION	MULTIPLICATION	DIVISION	PROBLEM SOLVING	READING & WRITING	OPERATIONS	PROBLEM SOLVING	READING & WRITING	ADDITION & SUBTRACTION	MULTIPLICATION & DIVISION	EQUIVALENTS	PROBLEM SOLVING	READING & WRITING	OPERATIONS	COMPUTATION	APPLIED PROBLEMS	PAYROLL & DEDUCTIONS	INCOME TAX	BANKING & BORROWING	OPERATING A HOME	OPERATING A CAR	BUDGETING	TIME	DISTANCE	LIQUID	WEIGHT	PROBLEM SOLVING

UNIT	I Working with Words					II Spelling	III Mechanics of Writing					IV Reading					V Writing Sentences				VI Writing Paragraphs				VII Skills in Research			VIII Personal Writing			
ITEM	A	B	C	D	E		A	B	C	D	E	A	B	C	D	E	A	B	C	D	A	B	C	D	A	B	C	A	B	C	D
COMMUNICATIONS	BASIC ENGLISH	PLURALS	CONTRACTIONS & ABBREVIATIONS	PREFIXES & SUFFIXES	SYNONYMS, ANTONYMS, HOMONYMS	NO INDIVIDUAL ITEMS	HANDWRITING	CAPITALIZATION	PUNCTUATION	POSSESSIVES	USAGE	WORD MEANING	BASIC COMPREHENSION	AUTHOR'S PURPOSE	FACT & OPINION	ADVERTISING	SENTENCE FORMS	SENTENCE USE	SENTENCE STRUCTURE	VARIETY	STRUCTURE	DEVELOPMENT	APPLIED WRITINGS	PROOFREADING	USING BOOKS	SUMMARY SKILL	LOCATING & PRESENTING	FORMS	BUSINESS LETTERS	RESUME	PERSONAL FILE

UNIT	I Foundations of Science	II Human Biology		III Health		IV Safety and First Aid		V Drugs	VI Ecology		VII Physical Science		VIII History, Geography, Government	
ITEM	A	A	B	A	B	A	B	A	A	B	A	B	A	B
SCIENCE	METHODS OF SCIENCE	LIVING MATTER	BODY SYSTEMS	FOODS AND NUTRITION	DISEASE PREVENTION	ACCIDENT PREVENTION	FIRST AID	DRUG PROBLEMS	THE EARTH & LIFE	MAN AND HIS ENVIRONMENT	CHEMISTRY	PHYSICS	HISTORY & GEOGRAPHY	GOVERNMENT

HOW TO USE THIS CHART:

1) Plan what you should do in each subject for one week.

2) Shade in the ITEMS which you plan to do thus:

3) After you successfully complete the studies and test for the item, shade in the item thus:

so a completed item will look like this:

4) Be sure you work your way through all the core subjects at about the same rate.

5) Mark in your optional units as you select them.

6) Write the details of your planning and all your test marks on your Weekly Planning Sheet.

7) At the end of each week check your progress and plan for the next week.

OPTIONS

VIII Perimeter, Area, Volume	
A	FIGURES AND FORMS
B	PERIMETER
C	AREA
D	VOLUME
E	PROBLEM SOLVING

IX Statistics	
A	AVERAGE
B	LINE GRAPHS
C	BAR GRAPHS
D	CIRCLE GRAPHS
E	PROBLEM SOLVING

X Geometry	
A	LINES
B	ANGLES
C	TRIANGLE
D	SCALE
E	PROBLEM SOLVING

XI Integers and Rationals	
A	DEFINITIONS
B	ADDITION & SUBTRACTION
C	MULTIPLICATION & DIVISION
D	ORDER OF OPERATIONS
E	FACTORING
F	PROBLEM SOLVING

XII Algebra	
A	VARIABLES & EXPRESSIONS
B	SENTENCES
C	ALGEBRAIC SOLUTIONS
D	POWERS
E	PROBLEM SOLVING

XIII Math Devices	
A	POWERS AND ROOTS
B	LOGARITHM TABLES
C	SLIDE RULE

IX Writing Composition	
A	NARRATIVES
B	DESCRIPTIVE
C	EXPOSITORY
D	ARGUMENT

X Critical Reading	
A	SETTING
B	PLOT
C	CHARACTERS
D	CONFLICT
E	THEMES

XII Technical Reports	
A	MAKING NOTES
B	CHARTS & DIAGRAMS
C	OUTLINING THE REPORT
D	WRITING THE REPORT

IX Chemistry	
A	PROPERTIES OF MATTER
B	ELEMENTS & COMPOUNDS
C	CHEMICAL REACTIONS

X Mechanics	
A	FORCE AND WORK
B	SIMPLE MECHANICS
C	ENERGY
D	MOTION

XI Gases	
A	PROPERTIES OF GASES
B	OXYGEN AND HYDROGEN

XII Hydraulics	
A	WATER
B	HYDRAULICS

XIII Heat	
A	HEAT & TEMPERATURE
B	THE EFFECTS OF HEAT
C	HEAT TRANSFER

XIV Electricity	
A	MAGNETISM
B	STATIC ELECTRICITY
C	CURRENT ELECTRICITY

CAREER GOALS:

1) _____

2) _____

3) _____

ESTIMATED COMPLETION:

DATE: _____

A MULTI-MEDIA ADULT EDUCATION SYSTEM IN QUEBEC: A DREAM COMES TRUE[1]

Gilles Provost

Journalist, le Devoir, Montreal

Gilles Provost gives an account of the extensive new multi-media adult education program being established in the Province of Quebec. This program, which has been in operation for two years, is aimed at bringing educational opportunities to those adults who otherwise could be deprived of them.

Shortly before Christmas (1970), the Cabinet gave approval in principle to the introduction of a multi-media system of education for adults in Quebec.

Next fall (1971), Quebec will have access to a teacherless, genuinely life-oriented educational system which reaches every Quebec home. In practice, an estimated half million adults will participate.

The basic component of the system will be the informal grouping of students by neighbourhood. These "classes" will be visited once a fortnight by an educational group leader. Textbooks will be replaced by a bi-monthly newspaper.

The main educational activity will be discussions by the work groups of problems that they encounter in their everyday surroundings. They will be assisted by open network television broadcasts and will also share in the development and continuous modification of proposed programs.

Anyone, whatever his educational background, will be able to enrol in the courses and receive relevant materials. A permanent register will be created at the provincial level. Examinations will be distinct from the program and will be open to anyone whether or not he has taken the courses. The examinations are intended to determine whether or not the candidate possesses a specific aptitude, not "whether he did the course well".

The brief notes are already enough to conjure up dreams in the minds of those teachers who feel restricted by classes, timetables, and curricula--in short, by a structure which is too rigid for everyday purposes. They also permit speculation about the possible repercussions that the introduction of this system will have on society and the present education system in Quebec. Undoubtedly this is one of the most important decisions to be made since the creation of the Department of Education in Quebec.

Overwhelming Needs

The committee that designed this complex and innovative project rapidly realized it had no alternative but to suggest something original that would truly answer adult needs, and develop continuing education in Quebec.

Half of the adult population

of Quebec has not completed high school. In Montreal there are an estimated 100,000 marginally literate people (in many cases this means people who had learned to read but who are no longer able to do so, through lack of practice).

Quebec's unemployment rate is one of the highest in the country. In March 1970 there were 206,000 unemployed workers in Quebec and it is estimated that at least a third of them were less than 25 years old.

Each year rapid changes in agriculture and many other industries necessitate the retraining of hundreds of thousands of workers. Many of them, forced to move into another social environment, find themselves completely lost, isolated and defenceless.

In most cases, this working population is not aware of the services that society provides. For example, in 1967, less than 15 per cent of the workers who would have been entitled to grants under the Manpower Mobility Program actually applied for them. The administrative machinery is so complex that most adults prefer not to resort to it, rather than to enter such a labyrinth.

There are also communications obstacles. Very few people are able to express themselves fully in a group. For instance, many people who deal with the public admit that they have great difficulty in being really understood by some classes of citizens, as words are frequently too complicated and technical.

It is evident that the courses for adults, as they have been organized for the last few years, cannot meet these divergent needs. Most often, they are poorly converted courses aimed at 10- to 14-year-olds. Thus, for example, unemployed workers are obliged to study Victor Hugo's poetry in order to obtain a job!

It has become more and more obvious that it is unrealistic to have adults go through the same educational process as children without taking into consideration concrete experience, social and family responsibilities and knowledge painfully acquired over the years.

The problems which the adult faces also have an urgency unknown to youth. They must be met by really suitable courses. There is no time to lose. The adult has less need for a general education than for developing his independence, his responsibility, his aptitudes and his abilities.

These needs were acutely felt by the planning committee created by the Department of Education at the request of the upgrading program committee. This committee cancelled the TEVEC (Community Educational Television) experiment in Saguenay because it did not solve the problems in time for the solutions to be of value--"...We took...so much time to close in on the problem that it is now the problem which closes us in."

An Education Rooted in Real Life

The planning committee submitted a 337-page report last July defining the philosophy of an education system that would truly meet the needs of adults, and suggesting a workable project, with specific structures, time schedules and financial estimates.

In this respect, the present

project is not merely a repetition of the TEVEC project. The committee has followed in the footsteps of "Opération Départ" which, in the province, determined the needs of adults and which, in Montreal, defined the philosophy of adult education. It collaborated with SESAME (the Department of Education's Program of Specialized Education for Adults). It also closely studied foreign experiments, notably Telekolleg in Bavaria, Télépromotion rurale in France, The Open University in Britain and The NHK Correspondence High School in Japan.

The planning committee reached the conclusion that the adult should be the architect of his own education, while the proposed educational tools should encourage maximum growth of the inner resources of those who are educating themselves. Finally, the adult should be able to rely at all times on a really continuing education.

This meant that a specific system had to be designed which was capable of being fitted into the environment of the people for whom it is intended, rather than thrusting them into an artificial school situation.

This system should also continuously offer clients new opportunities for challenging and participating in the program, upgrading their own qualifications, and acquiring information.

Furthermore, the system must be available to all, whatever their former education. Consequently, provision must be made for many possible entrance levels and for self-assessment. In order to become comprehensive, the system should be flexible enough to offer courses in many areas of interest, and to avoid becoming a close-ended.

The type of training anticipated was examined by committee members. The exact curriculum has not yet been determined because the "clients" will be asked to participate in defining their needs. However, it has been decided that training will be carried out along three major lines.

First, the curriculum must stimulate observation, analysis and understanding of the realities which make up the surroundings of adults in training. These realities may well be psychological, social, economic, or legal, as well as scientific or technical.

Secondly, the training should foster active participation. Clients must understand the dynamics of society in order to become more integrated in it, once they have grasped its mechanics and development. Thus personal reflection and experimentation will be encouraged.

Finally, there will be particular emphasis on subjects that promote communication and self-expression, especially French and mathematics. The project's authors hope that this training can be combined with other activities as the participants feel the need for it.

Structures of Participation

It is planned that the system will include specific structures of participation. At the local level there will be committees responsible for pooling the experiences of student groups. These local committees can help each other and exchange information.

Representatives from each local committee will meet with the persons responsible for continuing education

in each regional school board. This sub-regional committee will encourage exchanges on a larger scale and will give advice on the services offered and the directions to be taken.

The regional school boards will also play a part in creating continuing education centres where the adult can find the necessary information. They will provide discussion leaders and resource personnel and eventually participate in the evaluation of the program.

Eight regional councils in the province will be grouped to form the principal component of the system. The sub-regional committees, organizers of continuing education and local groups will be represented and students will normally be present.

This regional council will define the needs and priorities of each region and will be responsible for its budget. It will appoint a team to produce and cover television broadcasts in the region, provide information, distribute accessory documents, and give instruction in educational group dynamics.

At the provincial level, representatives of the regional councils, the general Continuing Education and Planning authorities, Radio-Quebec and the Technical Teaching Methods Service (SMTE) will be re-grouped to form an administrative board responsible to the Minister of Education. This board will hire staff, define the duties of the various organizations involved, and issue policy guidelines.

Eight Essential Activities

The day-to-day functioning of the project will be ensured by the general co-ordinator (member of the administrative board) and the heads of seven work teams (eight during the initial period).

The first team will be responsible for the educational group dynamics and the training of the leaders who will visit the various groups of adult students. These leaders should help them carry out the work expected of them.

A second team will be responsible for defining the training curriculum It will prepare the programs once the needs of the population have been established.

The task of the third team will be to produce the necessary radio and television broadcasts. The technical teams will be provided by the stations that produce the broadcasts (or by Radio-Quebec).

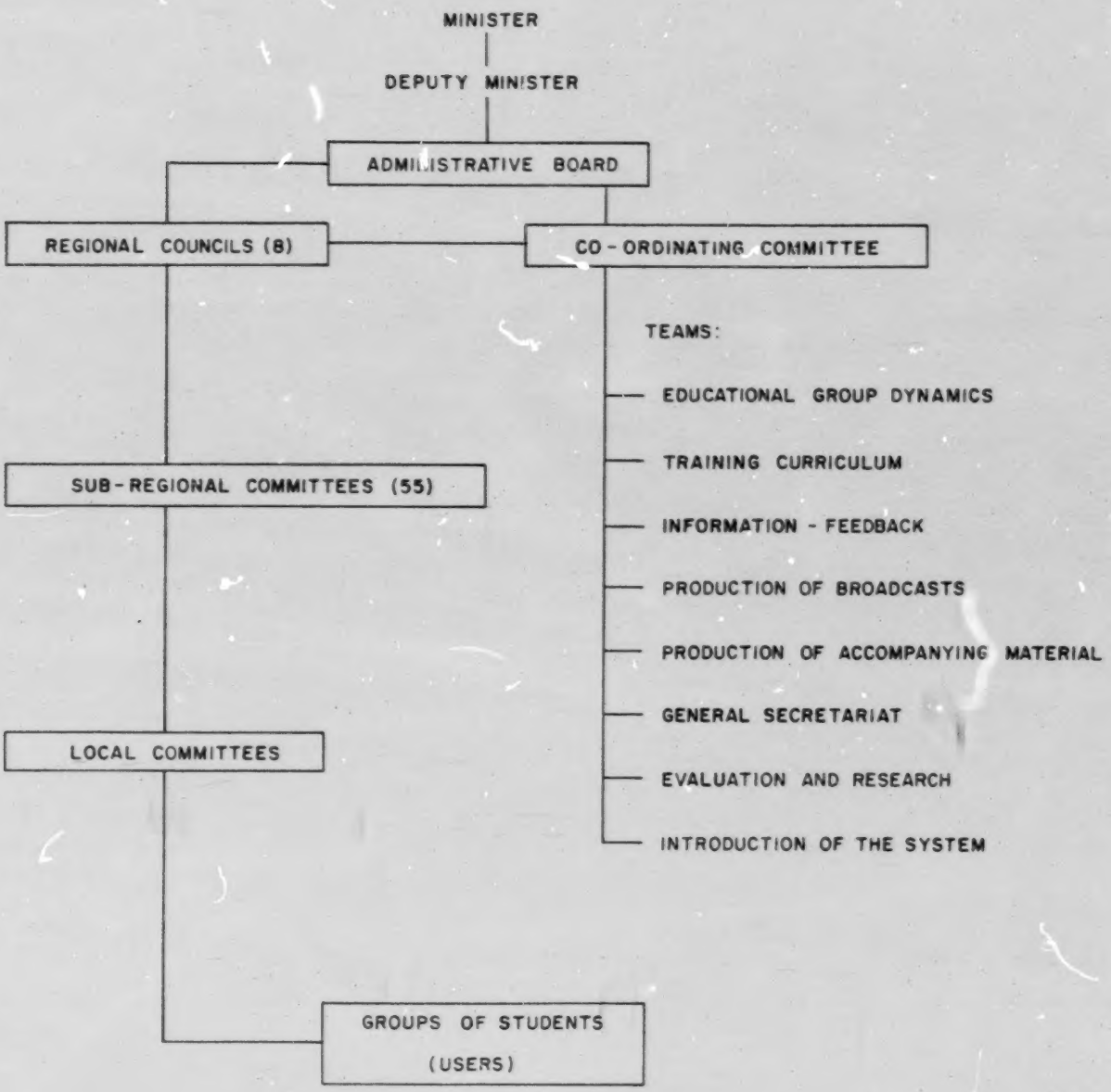
The fourth team will publish the necessary accompanying material whether it be in a temporary (newspaper) or a more permanent form (pamphlets, brochures).

The fifth team will be responsible for information and feedback: its main task will be to gather and analyse the reactions and suggestions of the system's users. It should also ensure adequate communication among the various components.

The two other teams will be responsible for administration and research. Administration includes keeping records, setting up central filing indexes, data processing and financial management. Researchers should monitor the development of the project and draw conclusions from it. The very newness of such an organization requires, in fact, that it not assume its final shape too quickly and that research not be neglected. Some members of this team will participate in perfecting an evaluation system independently of the project.

The eighth and last team will

ORGANIZATION CHART OF THE MULTI-MEDIA ADULT EDUCATION SYSTEM IN QUEBEC



exist only during the initiation of the network. It will introduce the system in regions which have yet to be reached.

Too Good to be True

Some critics fear that the television broadcasts will offer lectures only. The creators of this project, on the contrary, see these broadcasts as debates in which the population participates. Once the project has been broken in there might even be radio hot-lines!

For example, a television broadcast produced at the regional level might begin by presenting citizens who are concerned with pollution in their environment. This would be followed by a documentary valid for all of Quebec about present pollution control methods. The regional producer will then stage a debate between citizens and resource personnel. This will allow them to see how closely the facts mentioned in this documentary correspond to the local situation, or to judge whether the methods mentioned really face up to the stated problem.

Some observers consider this project too ambitious--they feel it is "too good to be true". To date, the project has received only government approval in principle. Yet, it seems that important decisions have at least been taken: a joint committee has been created to inaugurate the project officially, under the interim direction of the general planning branch. The Minister, Mr. Saint-Pierre, has spoken of beginning operations next September (1971). At press time, we were just expecting the orders-in-council which would confirm the decision.

It is already certain that the system will begin to operate in Montreal. It may also be established at the same time in the northwest or in the Saguenay, but this is not definite. It has been suggested that the Saguenay region, already exposed to the TEVEC experience, should remain a kind of pilot region within the system: no decision has yet been made in that respect.

The government's hesitation is in fact very understandable, if only because of the $5 to $6 million necessary for the functioning of the project during the first year alone. The probable consequences of this innovation would also make more than one politician think hard.

A Social and Academic Upheaval

In the social context, for example, this means that we will be inviting half a million underprivileged citizens to consider their situation without necessarily giving them a practical solution for their problems. Throughout the province, disillusioned adults are going to examine the society which surrounds them in order to discover how it works and find a valid way of entering it and adapting to it.

In the long run a collective "think-tank," such as this and an educational system based on the adult in his environment may have considerable political repercussions. It would also reduce the size of the silent majority, a group which often does not dare to confront reality. This could be an advantage for the present social system, if it truly allows these people to become adequately integrated. If, on the other hand, this project makes the population think without fulfilling the hopes it raises, the difficulties will just have begun...

In the educational field, the

consequences will not be negligible either: for the first time we are installing the embryo of a system which really functions in terms of continuing education. Until now it was being debated, but hardly any country had sincerely tried to transform this theory into practice. When this is done, it cannot fail to influence conventional education for young people.

In fact, once the multi-media system has proved itself, the schools will have to take its existence into account and re-adjust their courses and programs accordingly: a youth will no longer have to acquire a training in school for the rest of his days. Educational texts have frequently proclaimed that the school should "teach how to learn", but this has often remained a dead letter, because the present social system does not recognize the self-taught. In fact, society still functions as if all education should be given at school. Perhaps this will change.

The influence can also be more direct: a young person who finds school "boring" will perhaps be tempted to follow the same educational activity as his father, through the multi-media system... The teacher, shut up in his classroom and restricted by its rigid, sterile programs, will also look with envy at the kaleidoscopic, life-oriented programs available to adults. To sum up, the multi-media project will offer a concrete and practical alternative solution to the traditional school.

NOTE

[1] From: *Prospectives*, Vol. 7, No. 1, 1971.

MOTIVATING A.B.E. STUDENTS TO READ AND WRITE

L.L. Feinstein

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Motivating adults to read and write is indeed a challenge. In this article the author describes some practical techniques which he has successfully used in meeting this challenge. Daniel Fader's well known book Hooked on Books is used as a point of departure.

Teaching Reading Within a "Free" Classroom

The initial pattern for teaching reading in this type of classroom is based on a book by Daniel Fader entitled Hooked on Books.[1] The key concept, according to Dr. Fader, is to saturate the classroom with reading materials. These should be readily accessible and of considerable variety. There should be many paperback books, newspapers, magazines and comic books which would say to the student, in effect, "Pick me up--thumb through me--read me."

There should be little in the way of hard-cover books with the possible exception of a good dictionary. Each student should have access to or be given a paperback dictionary for his own use. The mechanics for distribution of the dictionaries and methods for saturating the classroom with reading materials are discussed in the book by Dr. Fader.

While working at the Kilmer Job Corps Center, Edison, New Jersey (1965-68), I modified and used a number of Dr. Fader's ideas for the teaching of Reading. To begin, there was a conscious attempt to bring in sexually oriented materials. This needs further explanation. So-called "sex-oriented" tabloid newspapers were brought into the classroom for their appearance and their universal appeal. These included such publications as the National Inquirer[2] and Midnight, which can be classified as "soft-core" pornography. The students, all male, gravitated toward them quickly.

The real value of using soft-core pornography to motivate students to read is illustrated by the following incident. One afternoon a contractor who was doing some work on the building visited my classroom. When he saw the materials on display he became quite upset. But the interesting thing was that at the same time as he expressed his indignation, he picked up the materials and began thumbing through them. It is precisely for this reason that soft-core pornography was chosen for display, and its effect on my class was startling. It brought many students back to the world of reading, and it was used for this reason alone. Better that they read pornography than not read at all.

All soft-core pornography has certain standard qualities. It is redundant and it is boring. What occurred most often in the classroom was that the students would use these materials daily for a period of two to three weeks, and by the end of this time begin to question the authenticity of the articles they

read. They felt that the articles often dealt with circumstances that were too far removed from their own experiences, or just too preposterous. They also spotted numerous examples of duplication. That is, an article would appear in one magazine and then be rewritten with only slight variations in a number of publications. After two to three weeks of reading this, the students became extremely bored.

Once students turn away soft-core pornography, their renewed interest in reading can be channeled in many different ways. At the Kilmer Job Corps Center there was a tremendous variety of paperback books, many oriented toward the ethnic group that predominated in the classroom. There were also comic books, classic comics, standard newspapers, some sophisticated newspapers, trade journals, occupational journals and as much job-related material as could be brought in at reasonable cost and displayed within the four walls of the classroom. Magazine racks were used for display, and the student could choose whatever he wished in order to continue his reading.

My program differed markedly from that of Dr. Fader in this respect: he does not recommend the use of pornography, and I do. How it could be used within a co-educational classroom is a problem that I have never had to confront. But this should not be insurmountable especially in light of the awareness created by the so-called "sexual revolution."

The Teaching of English Within a "Free" Classroom

There was little or no pressure during the 45 minutes the student spent in the classroom. The only requirement was that each student record precisely in a log what he did during that day (a recommendation of Dr. Fader). Using this idea, I was able to build my own English program.

Each student was required to produce a certain quantity of written material every day. Usually the material was hand written, single spaced, and filled one side of an 8½ x 11 inch sheet of paper. Often a student would say, "Well, I don't exactly know what it is you want me to write, but I'll just give you a brief summary." This is a good beginning. In many cases, however, a student would say, "I did nothing." If this happens, ask him to say just that on paper. This forces him to think more carefully about how he spent the 45-minute period, and usually causes him to write down something more descriptive than "I did nothing."

If a student really can't think of anything to write then Dr. Fader suggests that you tell him to copy articles from magazines. While the student is doing this, he is really copying good sentence and paragraph structure--thoughts that are properly organized, correctly punctuated and correctly spelled. Many professors in graduate school remind students to copy articles out of the New Yorker magazine because of its excellent literary standards. This practice is similar to what Dr. Fader has asked us to do with our students.

A student who is discontented may take advantage of the "freer" atmosphere of this classroom situation and express his feelings in writing. His discontent may stem from the non-traditional structure within the classroom, or from the insistence that he express his views in writing as well as do some reading. Regardless of the particular gripe a student might have, the instructor should always respond to it in the

same fashion. Tell the student that if he puts his complaint in writing you will have it "published" for classroom distribution. He will probably question your sincerity at this point, so it is crucial that you follow through on your promise regardless of the content of the student's material. My own experience has been that in the beginning many students are unable to express their thoughts without using profanity. This should not, however, deter you from using this technique.

To "publish" the material, have the student's thoughts typed on a ditto master. Run off a copy for each of the students and a few extra for interested members at home. At this point, motivation should no longer be a problem. Before the ditto is typed ask the student whether or not he would like his manuscript printed as is or whether he would prefer that it be edited so that mistakes in grammar, punctuation, and spelling are rectified. Being fearful of ridicule from his peers, the student will almost always ask that the material he has written be reviewed and corrections made before it is typed. It is at this point that the instructor teaches the student grammar, punctuation, organization of his thoughts, and spelling. What is so important about this technique is that the student has come to the teacher for help. You have not told him that he has to learn these skills. Rather, he has come to you with a definite need, and through repetition of this pattern over a period of weeks or months, the student is gradually learning proper spelling, punctuation, capitalization and sentence construction. You must remember that it takes considerable time for this method to be successful.

One problem with this method (as with most others) is that it will work for some students but certainly not for all. However, once the ditto is typed and run off and the material written by the student is passed out to his colleagues, there is usually a very verbal response from the other members of the class. The important thing for the instructor to do, regardless of the views expressed, is to say, "If you put your thoughts about this material into writing, then I will print them." From this point on the process begins to proliferate. As each student writes a reply to what someone else has written, additional students respond because of their own feelings and also because they too wish to see their ideas in print. This produces a great deal of student activity, participation and learning within the classroom. As time goes by it becomes quite evident that many of the students have been able to improve their writing skills, mainly because they have been doing a good deal of writing with the explicit intent of having it published within the classroom. The longer the program is able to operate, the more proficient the students become in these particular writing skills.

Once the student has been motivated to read and to do a good deal of writing, the question then becomes, "What next?" What should follow after a number of months in this type of classroom configuration? There is no set answer. Within the Kilmer context there were a number of options open to us. If a student was good, we could recommend that he consider writing for a commercial publication, the Reader's Digest, for example. One student was successful in getting his paper purchased. There are numerous commercial publications in which the student might hope to have something published.

Another avenue, of course, is to transfer those students who need specific remedial work in order to obtain their high school equivalency diploma into a GED-type program. For those students who are unable to improve their reading level, within this "free" classroom, it would be advantageous to provide them with remedial reading help as quickly as possible. It might be worthwhile for some students just to remain in your program and continue to read and write and publish their ideas within the classroom. The student is still the best judge of whether or not he has outgrown your particular class and is ready to move on to something bigger, something more challenging.

Whatever educational program your students move into, your door should always be open to them, and you should always offer them a haven from the traditional school situation. If you have the space, set aside one or two carrels in your class for individuals who have left your program but return of their own accord to continue their reading and writing. This will permit current students to discuss their problems with graduates of your classroom.

A Final Note

I am fully aware of the difficulty of creating this type of "free" classroom. However, some of the techniques described can be adapted and used even in a traditional instructional situation. It is left to the individual teacher to take these suggestions and modify them in order to enrich the learning experience of all concerned.

NOTES

[1] Fader, Daniel N., and McNeil, Elton B., *Hooked on Books*, New York: Berkley Publishing Corporation, 1968.

[2] The National Inquirer dropped its dominant sex theme in 1970.

[3] Anderson, Robert A., "Writing Lessons That Pay Off," *Scholastic Teacher*, November, December, 1972.

EDUCATION AND FUTURE SHOCK[1]

Antoine Baby

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In his article, the author challenges some of Toffler's views on educating for "future shock". Antoine Baby feels that the real issue is the need to help individuals become more flexible and tolerant of present circumstances and changes.

In a previous article[2] I approached the subject of "future shock" by commenting on A. Toffler's well known book.[3] First, I tried to show that the term "future shock" itself was only an expression and that, strictly speaking there is no shock inherent in the future. Consequently, I attempted to analyse a few of the solutions that have been tentatively proposed with respect to the future, in particular those which would better enable us to "preplan", to some extent, the "unexpected".

In this article I shall outline the manner in which education can constitute a powerful "future shock absorber". Beginning with Toffler's views on what education should be as it confronts a threatening and changeable future, I shall first discuss the question of individual education, that is, the educational process, and follow with an analysis of the educational institutions of tomorrow, especially the School.

Johnny or the Neuroses of Anticipation

Attempting to characterize education in the post-industrial era, Toffler writes:

> "It is no longer sufficient for Johnny to understand the past. It is not even enough for him to understand the present, for the here-and-now environment will soon vanish. Johnny must learn to anticipate the directions and rate of change. He must, to put it technically, learn to make repeated, probabilistic, increasingly long-range assumptions about the future. And so must Johnny's teachers."[4]

To summarize Toffler's thoughts, Johnny's education will enable him to face future shock by helping him develop his sense of anticipation to the maximum. At first glance, this view of tomorrow's education seems logical: the more foreseeable the future, the less chance that it will cause the violent jolt and state of shock inherent in a "shocking" future. In other words, the more that the unforeseeable aspect of the future is reduced by systematic and deliberate anticipation, the easier will be the adjustment to this change.

No doubt that is, at least in theory, an area for exploration in greater depth. In practice, however, I have serious reservations. These are threefold: 1) purely technical, concerning foresight and futurology; 2) psychological, concerning the individual; and 3) psycho-sociological, concerning various known tendencies of present-day youth as a distinct age group. Technically speaking, educating Johnny to have a future-focused attitude is not a light task. In my pre-

vious article,[5] I mentioned the often insurmountable difficulties that a society encounters when it tries to "foresee the unforeseeable." Yet, compared with the individual, especially when he is young and relatively defenceless, it has the distinct advantage of access to predictable facts and information and, above all, a power of decision which the individual does not have. In other words, valid anticipation of the future is based on so many factors that even the best organized societies rarely succeed in controlling them sufficiently well to establish forecasts that are at least moderately viable. Thus if the possibility of a society anticipating the future is still closer to science fiction than to science, the possibility of an individual doing so is even more remote, whatever the famous futurologist may think.

Worse still, in the purely psychological context, we can easily foresee the negative effects of an education with such an emphasis on anticipating the future. The constant questioning of one's own future, the future of one's surroundings and often that of mankind in general, especially when it is pushed beyond reasonable limits, could lead to symptoms ranging from simple uneasiness to a pathological state--a paralysing and sterile anguish and anxiety. Pending proof to the contrary, I will not hesitate to believe that by being educated in the "Tofflerian" mould, Johnny will sooner or later end up with what I might for lack of a better term call an "anticipation neurosis".

If Johnny develops a defence mechanism in the form of rigid expectations, the poor fellow runs a strong chance of going from frustration to frustration as he sees his "prophecies" fail to materialize! Each of us has seen enough disappointing experiences, of projects, plans and hopes coming to nothing, to realize that there is no benefit in deliberately increasing the burden of disappointment and disillusionment that mankind in its natural state must bear.

To make Johnny some kind of fortune-teller in order to shield him from future shock is certainly not the solution. Observations made recently on adolescence indicate that it is fruitless to try to push youth into thinking about the problems of the future. Young people are not too ready to sacrifice the immediate present for a very hypothetical future, for they tend to live from day to day and prefer "immediate gratifications" to "deferred gratifications". At this point I will not reopen the debate on whether this is a universal characteristic of youth. It is, however, a fairly widespread trait of the youth with whom we must work here and now.

The social status of the adolescent has changed from its old image of a "tourist in transit" to a position of significance with which the rest of society must learn to reckon. Thus it would be contrary to expectation to ask youth, so absorbed in the present and determined to find its own identity, to concentrate on a systematic anticipation of the future.

Let us now see how we might prepare the individual for future shock without transforming him into a computer, a prophet or a fortune-teller.

The Solution: An Education Based on the Present

Asked how I would prepare a youth for future shock, I think my reply would be that I would try to make him conscious of the present rather than the future, by encouraging him to develop his adaptability to changes that characterizes each moment of the present. This is basically what

P. Naville in his *"Théorie de l'orientation professionnelle"* (Theory of Vocational Guidance) (1947) so aptly called "adaptitude"--the ability to adapt oneself indefinitely. As I see it, the individual who has a high degree of this quality is made much more uneasy by his own inability to adjust to the change rather than by the change itself. Such a person is also more worried by his own immobility than by the highly fluid state of his surroundings and thus seeks the elements of his own security outside stability and permanence. To sum up, he is an individual who is positively stimulated by the uncertain and the unknown and for whom all is relative, starting with his own methods of thinking and acting. As for the urgent need to develop this "adaptitude" in the individual, the guidance counsellor and all educators (taking into account the specificity of the work of each), should concentrate on the following:

On the psychological level:

1. Work at limbering up the individual's defence and adjustment mechanisms;
2. Work at developing in the individual a greater tolerance for frustration, ambiguity, the unforeseen and the unknown;
3. Work at reducing the insecurity and anxiety caused within an individual when other people's actions differ from his own behavior, i.e., work at developing his independence.

On the psycho-sociological level:

1. Encourage learning about the variety of manners, beliefs and values in a pluralist society; allow the individual to discover that there are often several ways of doing things which are socially equivalent; that, in each case, he must choose the one that suits him best without being disoriented by the variety available;
2. Work at reconciling the individual to the rapid evolution of social standards and accelerated cultural change; one of the most startling aspects of future shock is that it will no longer be possible for the same individual to maintain the same set of standards, values and beliefs throughout his life.

The "adaptitude" introduced by Naville nearly 30 years ago can in this way be made the focal point of an education which prevents future shock. This education would have two advantages over that proposed by Toffler: 1) it is based on the present and on the adjustment to a rapidly changing environment; 2) it is not limited to the strictly cognitive aspects of preparation for the future. It appears to be more complete in that it not only includes an understanding of future situations but also an adjustment of the individual's basic attitudes and emotional reactions as he is confronted with the unknown.

It would be interesting to compare the two approaches within the framework of a longitudinal study. It is quite evident that, faced with such a complex situation as adjustment to an accelerating rate of change (which is the change we know and which incidentally Toffler has excellently described in his book), it would not be enough to state a priori that one educational approach is better than the other.

Let us now see what educational institutions might be like in the post-

industrial society. To facilitate discussion of this subject, we will use a convenient term to designate all the educational institutions of a given society. This term is "School" with a capital S. Obviously, this does not necessarily mean the social institutions which we now call "school", even less a school that is determined by a geographical location and specific physical characteristics and which we will call, for want of a better term, "the concrete school".

The School will exist, with or without walls

The new School will be less formalized and physically, psychologically and socially better integrated in our daily life. Today's limited school must be made to relinquish its pedagogical monopoly. We shall probably see the traditional distinction between "regular education" and "continuing education" disappear, to the point that the individual's entire life will be considered to be, in some way, an educational process that is constantly being rethought and restructured. It will be a daily, life-long school, and what we call the "street school" today will be as important as the "concrete school". In it everyone will be both teacher and student, and any situation, any human experience may be a valid subject for learning, without necessarily being geared to the restricted context of preparation for gainful employment.

These are the main points on which Toffler, Paul Goodman, Illich, and others who have tried to describe the School of Tomorrow, have succeeded in reaching a consensus. However, this bold attempt to describe the educational institutions of the future must be pursued still further. We shall try to explore some additional approaches which, although far from new, are viewed with suspicion by most prominent education theorists in the Western world. These proposals are more concerned with what I might call the School's social use than its actual form. Although we are reaching some agreement about the kind of School that would help people bridge the gap between present and future, the same cannot be said about the use we are to make of this institution. In other words, although much has been said about the need to review the resources of a school adapted to the future, and although the revolution in pedagogical techniques shows great imagination, very little has been said or done about the primary objectives of the school. This deplorable situation almost amounts to putting the cart before the horse. It is high time educators realized this, if they want to avoid becoming mere puppets, manipulated by the powers behind technological developments which powers, according to Toffler, would escape any form of control and be left to pure chance.[6]

Non-directive pedagogy in a directive school

Now for a concrete example of the danger I just mentioned. Everyone knows how popular the non-directive approach has been, both in the actual teaching situation and in the various forms of supporting functions offered by the School, that of vocational guidance being perhaps the most familiar to the reader. In view of this, the following question comes to mind: does this extraordinary display of talent and energy serve any purpose at all, since the School as such has remained extremely directive; that is, it remains a selective and discriminatory tool for the preservation of the privileges of a single, dominant class. Furthermore, the School is used to define, monopolistically and exclusively, the

paths to power and all the privileges inherent in it. Finally, the School merely helps to maintain and increase social inequality, by its refusal to be accessible and truly open to those who were not born into the clan that built it and maintains its structure. How can we claim that pedagogy and supporting services in a school are student centred, when the School's focus is on maintaining the privileges of a social class? How will we get those educators and students who honestly believe this claim, out of the trap, when they are forced to realize that individual educational programs are neither logical nor viable, if they meekly go along with the broad collective plan devised by a group that is more absorbed in its own narrow interests than in the community's actual needs?

It makes little sense to launch an attack on the pedagogical techniques and resources of today's school, unless we first tackle its basic objectives. That would merely help to obscure the real problems and foster the illusion of a school that is open and accessible. It would be playing into the hands of those who are aware that this institution is being attacked on all sides, and want to make it outwardly more attractive without changing its basic aim, admirably suited to their purposes as it is now.

If educational institutions are to be future shock absorbers, they will need a number of characteristics other than those described by the more popular authors on the subject. These characteristics, as we have said previously, concern the institutions' aim, function and social use, far more than their internal structure.

With or without walls, the school will be community property

One of the first steps will be to bring down the barriers that confine knowledge to a chosen few. In our context, the School must be considered part of our capital assets. If, as I tried to demonstrate in my previous article, a community cannot in any way foresee the future unless it fully controls ownership of its essential capital assets, the School, as an essential capital investment, will have to become a real community property, an instrument of progress for all individuals and all classes of society, according to their respective aspirations.

At the present time, the number of people who have a say in defining useful priviledged knowledge, and the most effective ways to acquire this knowledge, is very small. Those who do have this power use it in such a way that the knowledge is limited to what they themselves know, and the ways to acquire it are those to which they have access, to the exclusion of all others. I still wonder why we have not yet been able to demand that professional associations, for instance, show as much scientific precision in defining their admission criteria as when they assess the capabilities and competence of future members. When and where was it proved beyond a doubt that there was only one route leading to the practice of medicine, law or even guidance counselling, namely, the one we know today? Can anyone state definitely that efforts made outside the particular academic program provided by these monopolistic groups would not achieve equivalent, or even better results? When was it ever scientifically proved that in a society such as ours, the only way to dispense justice, or to obtain it for a third party, was

by being a member of the sacrosanct Bar? What is the actual basis for stating that, unless someone has two years of CEGEP and has a D.E.C. (Translator's note: diplôme d'études collégiales, obtained upon graduating from a CEGEP), this person cannot get through university?

The School will become a collective property only to the extent that it also becomes the servant of a knowledge that represents divergent purposes and the many ways of comprehending reality and the varying thought patterns that characterize a modern society. This School for everyone will, for instance, reinstate intuition and creative imagination as ways of acquiring knowledge, and again give them their rightful place beside logic, which in Western schools has received preference to a sometimes unwarranted degree.

Tomorrow's school should also reinstate gratuitous knowledge, that is, knowledge without a predetermined objective, and which the individual can select according to his own needs and inclination. Very little of what the School offers today is useful to the individual who is learning for the present. This is so true that, sooner or later, for lack of a better argument, teachers at all levels are forced to use the classic phrase: "Believe me, my boy, it will be useful to you some day".

The opportunity to be given the individual by the School, to determine for himself, and according to his present needs, the objectives of his exploratory activities, would undoubtedly encourage man's ability to learn by himself what and when he wants to.

The best preparation for any future shock will be that given by the school of what Margaret Mead[7] calls the "prefigurative culture", that is a culture in which the relationship between the "initiated" and the "uninitiated" will not necessarily be based on status or age, but rather on experience. Because of the accelerated rate of change we are witnessing, and the newness of some situations, the younger individual's experience may be as good as, or even better than his elder's. A solution to the drug problem, for instance, would not necessarily be found and forced by older people who, as was often the case in our composite schools, have no knowledge and no pertinent experience of the problem. Younger individuals have at least one advantage over their elders: they know what they are talking about!

The prefigurative culture's School will be a place where the "initiating" relationship is not one-way, and where the roles of teacher and student are interchangeable. This type of education institution will perhaps be the best equipped to prevent future shock, because it is immensely flexible. If developing "adaptitude" is, as I believe, the focal point, why should the School not also promote the development of this particular ability among all categories of citizens, without exception? Personally, I think that the School will be most likely to play this role under the conditions outlined above.

NOTES

[1] *L'Orientation Professionnelle* (Vocational Guidance), Vol. 9, No. 1, 1973.

[2] *L'Orientation Professionnelle* (Vocational Guidance), Vol. 8, No. 4, pp. 307-319.

[3] Toffler, A. *Future Shock*, Bantam Books, Inc., N.Y., 1970.

[4] *Ibid*, p. 403.

[5] *Ibid*, pp. 311-316.

[6] In my previous article I explained why I could not agree with Toffler, when he uses the "sorcerer's apprentice" principle in discussing technological development. According to this principle, technological development has gathered momentum to the point where no one can control it any longer.

[7] Mead, Margaret. *Culture and Commitment: A Study of the Generation Gap*, Garden City, N.Y., Published for the American Museum of Natural Hisotry, Natural History Press, 1970.

PRACTICE SESSIONS IN NONSKILL COURSES

"Techniques for Teachers of Adults", Vol. XIV, No. 2, November 1973

National Association for Public Continuing and Adult Education, Washington, D.C.

"Practice is so crucial for total understanding that you must use all the ingenuity you can muster to provide for it," says the Faculty Handbook of the U.S. Department of Agriculture's Graduate School. However, practice sessions are rarely seen in nonvocational classes for adults. In many academic classes, it is the instructor rather than the student who is usually practicing the behavior which is being taught. It is not enough for the teacher to demonstrate a technique--even such intellectual processes as problem solving or critical reading--and explain it thoroughly. If the student is to learn, he must have actual practice in tracking down facts, in testing the validity of evidence, and in making judgements. This practice must be as genuine and real to the student as time and circumstances allow. Says the Faculty Handbook:

> "A student learns something of fact, principle, and mode of attack in a nutrition course if she is attentive to the instructor who is discussing how to work out a diet for a hypothetical sick person. She learns more if she herself works out a diet for some hypothetical sick person. She learns most if she is solving a diet problem for a relative or friend."

How Some Teachers Provide Practice

How can you help students understand an intangible idea or concept--through practice? It's not easy, but it can be done. For example:

- To teach the concept of "maturity," a psychology teacher had his students write short self-portraits, describing themselves as honestly and objectively as they could. The anonymous portraits were then read by the class, and compared to a theoretically ideal, mature person.

- An art teacher and a psychology teacher teamed up in one school to give students practice with the concepts of prejudice, presupposition, and stereotyped perceptions. Each art student painted a portrait of the same person. Then each of the psychology students, not realizing the same person appeared in all of the portraits, was asked to describe the kind of person he thought the model represented, and how he felt about the model's personality traits. The art students were then asked what they thought of the model as they painted the portraits. The comments of both groups were as varied as the portraits themselves. The instructors and students then discussed the psychological factors that governed their feelings about the model. Via this practice session, the students gained insight into how they reach decisions and judgements about people.

- Here's how some teachers give students practice in critical reading:

  Give each student a newspaper article or editorial. Tell him to check for inaccuracies, meaningless statements, emotional words rather than facts... and explain why such factors may occur.

  Demonstrate how the meaning of a sentence can be changed by changing the punctuation. Then have the students change the meaning of a given sentence by changing its punctuation.

  Using a political article, newspaper column, or editorial, have students answer these questions: What does the writer want you to believe? What methods is he using to convince you--facts, opinions, emotionally charged words, or phrases?

- To help students "internalize" (apply the ideas to themselves), many teachers use the discussion method rather than textbook learning alone. For example, students in an American history class studying the "Golden Age" of American politics prior to the Civil War will have a much more complete feeling of what the term means if they discuss the matter among themselves. The insights and understanding they receive will come from their own ideas and experience and rational thinking--rather than from material read in a textbook book or from a teacher lecture. Textbooks and lectures should be used to provide the material for student discussion.

- How can you give students practice in life situations--to help them improve their relationships with others? In recent years, role playing has emerged as an effective technique. You can set up situations that occur on jobs, in of-

fices, or in the home. They can involve situations between one worker and another, between employer and employee, between parent and child.

Is Learning a Spectator Sport in your Class

Do you really involve your students in the learning action? Or do you tend to dominate the scene, run the show? To find out, answer the following questions as honestly as you can:

- Does your class tend to be a one-man talk show? In other words, do you talk more than your students do?

- When students ask questions, who gives the answers--you, or other class members?

- Do you create opportunities for your students to practice what they are trying to learn, or do you think the reading, listening, and memorizing are the best ways to learn?

- Do you make special efforts to involve shy, quiet students in student projects and learning activities?

- When a chalkboard or flipsheet is used, do you let a student write the sentences, word lists, or ideas--or do you do the writing yourself?

- Do you encourage students to question your statements or ideas--or do you prefer non-critical acceptance of what you say?

Creating your own Teaching Materials

It is impossible to meet the special needs and interests of individual students with total dependence on standard textbooks and workbooks. These materials need to be supplemented with teacher-created tools, to keep the students interested and motivated. What kinds of materials are teachers preparing for use with adult classes? A group of teachers said the following aids worked well in their classes:

- Short stories, playlets about practical, daily-life situations, and short paragraphs, all written by teachers. Experience stories, dictated by individual students or groups of students, typed by the teacher, and used as reading material by the class. Some teachers collect files of these student-created materials for use with future classes.

- Scrambled sentences about a growing baby, which were rearranged into their proper child-development sequence by mothers in an Aid-For-Dependent-Children program.

- Flash cards of many kinds: letters, manuscript and cursive, upper and lower case; sight-words, vocabulary words; phrases; simple arithmetic problems. The answer is on a fold-down flap, so there is instant feedback. The same technique is used with English or foreign vocabulary cards, with pictures on the flap.

- Many kinds of dittoed worksheets: simple reinforcement of the work of the reading textbook which usually proceeds too quickly; mimeographed questions designed to give students a purpose for read-

ing a certain piece of material or viewing a certain film; penmanship samples to copy; sentences which need either a period or a question mark; reproduced forms, such as job applications, social security forms, or credit forms.

- One teacher taped controversial radio shows and TV panel shows, in order to generate class discussion.

- Lyrics of popular songs were dittoed for group singing, in an effort to develop larger vocabulary.

- Many teachers created crossword puzzles and word Bingo games for A.B.E. students.

Teachers of adults often find it necessary to prepare their own slides for overhead projectors, their own posters, charts and graphs, reproductions of newspaper and magazine articles, tape recordings. Commercial producers do not always prepare materials suitable for adult students and if they do, some schools can not afford to buy them. You'll find the following materials a big help in creating these instructional tools:

India ink speedball pens
Marking pens in various colors
Poster paints and brushes
Acetate, transparent material
Duplicating machines
Rubber stamp sets
Stencils in various sizes and types
Flannel boards
Dry-mount tissues for mounting pictures
Transparent tape, masking tape, polarizing tape
Transparent pencils and markers for making transparencies
Glue, paste, chart and graph paper, construction paper
Paste-on type for making posters
T-squares, rulers, and other simple drawing tools.

RECURRENT EDUCATION AND MANPOWER TRAINING

N.K. Chippindale

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In the article that follows; J.R. Gass offers an overview of an idea which is coming to have increasing impact on the thinking of all concerned with the future of education and training, especially those who are primarily concerned with the needs of adults. This concept has become known as "recurrent education" and differs subtly but importantly, at least in emphasis, from "continuing education," "life-long learning," and other recent approaches to adult education. While not ignoring the part-time learning experiences which figure so prominently in these other concepts, recurrent education stresses the need for full-time learning at various points in the individual's adult life, and requires that provision be made for some form of financial support during these periods. In addition, recurrent education is strongly tied to occupational development while still retaining more general human development aims. It thus has a good deal in common with the manpower training concept, but its alternating pattern of work and learning introduces a new note into what has often been seen as a remedial approach for those who must unexpectedly change jobs.

The recurrent education concept has potentially far-reaching implications for Canada's entire system of post-secondary and adult education and training. In addition, it may influence such matters as occupational certification and employee-employer bargaining, as well as our whole notion of the normal career path. It means a substantial reallocation of social resources among age groups, breaking, as Gass says, "the monopoly of the 16-19 age group on access to higher education." But it is on one particular set of implications that this brief introduction focuses.

For the Department of Manpower and Immigration, recurrent education (or, more appropriately, "recurrent training") has special significance. One of the department's most important responsibilities is to provide training, under the Canada Manpower Training Program (CMTP), that will improve the earning potential or employability of adult workers. Since the inception of this program in 1967, it has been recognized that this would entail retraining people more than once because of the rapidly changing demands of the labour market. However, the demands on the program in its first few years of operation, partly created by the backlog of need and partly by the high unemployment levels of the late 60s, caused the program to be regarded chiefly as providing a "second chance" for those who failed in their youth to acquire adequate job training and education. But now the department is increasingly thinking in terms of the retraining of adults through a recurrent approach and has recently developed new policies so that the program can provide "more than a second chance."

One reason for offering recurrent opportunities for occupation-

al training has been mentioned--to help the worker adapt to the changing needs of the labour market. But there are others. For the worker who needs specific employment skills, public funds will be more efficiently utilized and the worker's needs directly met by providing short, specialized courses rather than a long course, only part of which is relevant to the worker's particular job. However, this approach is only likely to be successful if the worker can return to training from time to time to pick up other needed skills. Training would thus be provided periodically (i.e., recurrently) as the need and opportunity arise.

For the disadvantaged Canadian, whose lack of basic education and employment skills exclude him from successful competition in the labour market, the problem is rather different. Clearly he has a long way to go to overcome his initial setbacks, and it has often been suggested that the Canada Manpower Training Program should provide lengthly uninterrupted periods of training, such as BTSD, to help him achieve this. The department, however, is proceeding on the assumption that the way to help people succeed in the world of work is not to remove them from it for long periods. Rather, they should be helped to move up the occupational ladder rung by rung, receiving additional training when they need it. In other words, the recurrent training model appears to fit the needs of the disadvantaged better than simply extending the length of training.

One of the great advantages of the recurrent approach to education and training, whether for the disadvantaged or for the more fortunate members of our society, is that it permits the maintenance of a close relationship between learning and life. As well, it allows a variety of learning experiences (other than the conventional institutional arrangements) to be integrated within a coherent pattern of career development for the individual. The challenge, then, is for teachers, administrators and counsellors within the adult training systems of Canada to view the learning needs of the individual student within the larger context of his career development. The Department of Manpower and Immigration is encouraging this approach through the introduction of Career Development Plans for clients who have complex training needs. Classroom learning will continue to play a vital role in helping people to become more productive and satisfied contributors to society, but it must be reinforced by the learning experiences that only take place in the world of life and work.

Discussions about the "changing work ethic" notwithstanding, work will remain a central factor in life for many people: but it is not the whole of life. What we need, therefore, and what the recurrent education concept can help us achieve, is recognition of the complementary roles of occupational training and more general human development. In particular, we no longer need to feel that the "second chance" provided by Manpower Training is the "last chance" to meet a whole series of competing educational, cultural and skill goals. The adult taking BTSD is not lost forever to the educational system once he graduates; he may be attracted back to upgrade his basic education still further or to learn history, or music, or sailing a boat. He may have other chances for occupational training, and opportunities for spare-time learning are everywhere. Perhaps the most valuable thing he can carry away from his BTSD experience is not the particular skills and knowledge covered by the curriculum, but a reawakened

sense of his own ability to learn from life, from work and in his classroom.

The recurrent education concept is only just beginning to affect Manpower Training in Canada, but it seems fair to predict that its influence will grow rapidly in this, as in other fields. Just as the 60s was the decade of post-secondary education, so the 70s could be the decade of recurrent education. Gass' article is important reading for all of us.

RECURRENT EDUCATION - A SOLUTION TO THE CRISIS OF EDUCATION?[1]

J.R. Gass, Director

OECD[2] Centre for Educational Research and Innovation

OECD has become heavily involved in education simply because it is now recognised that education is intimately linked with social and economic progress. This was by no means accepted 20 years ago, but public opinion now looks upon education as making a contribution to the solution of many social problems, ranging from overcoming the handicaps of socially disadvantaged children in the years before primary school to the adjustment of adult workers to new economic conditions, in addition to the traditional task of preparing young people for their responsibilities as citizens. More fundamentally, however, the advanced societies have accepted the proposition that more knowledge and higher skills are somehow the open sesame to individual, social and economic progress--and that access to knowledge and skills through education is one of the foundation stones of equality.

The consequence has been a vast growth of education in the last 20 years. About a quarter of the population of OECD Member countries are pupils in some kind of formal education--about 180 million people. Many others are engaged in part time training or evening classes--perhaps the equivalent of 15-20 million when adjusted to a full-time basis. Nine million teachers provide educational services--roughly 3 per cent of the labour force. Figures on non-teaching personnel are not available for many countries, but it is clear that the total figure for OECD countries must run into several millions. Education is therefore the biggest organised activity in OECD countries. It is also growing rapidly. In the 10 years 1960-70 the number of people receiving education rose by approximately a quarter. The biggest expansion has been in non-compulsory education where enrolments increased by 26 million, while in compulsory

education there was also an increase of about 10 million.

The basic question is whether educational growth can continue in the 1970's without raising fundamental questions about the nature of the educational system. Clearly there are widespread dissatisfactions with the present patterns of educational growth. To change it we need to understand the driving force behind it.

The key to the process of educational growth is that education has become the instrument for social selection. People want more and more of it for their children even if they sometimes regret the aggregate chaos when all individual demands are added up, because they know full well that the future is at stake. Many would probably agree that the personal development of their own children would be better assured by some practical experience, before plunging somewhat blindly into higher education. But since the educational system of today gives most opportunities to young people immediately after secondary school, they cannot afford to take the risk of delaying entry into higher education. But what would happen if the system could be changed so that such irreversible decisions did not have to be taken; if access to higher education could take place on an equal basis for adults as well as young people; if the alternation of periods of work and education became the regular pattern of individual development? In other words, could a system of "recurrent education" provide a long-term solution to the crisis of education which is now clearly apparent in many OECD countries?

Recurrent Education and the Individual

To get at this question we need first of all to examine how recurrent education would affect the individual. As a social institution, education has a unique role in relating (not necessarily "adapting") the individual to his or her society. The educational "system" is in reality a series of interventions in the life cycle of the individual, of which the broad pattern is 5-10 (primary), 11-16 (lower secondary), 16-19 (upper secondary), and 19-25 (post-secondary).

There are clear signs that this traditional educational model which has taken the form of a progressive extension upwards of full-time education for young people, is less viable than in the past. If we were to do a serious analysis of contemporary life patterns and the ways in which education could serve individual development, we would discover many contradictions between the traditional system and the realities of personal development, such as:

- the forced choice between continued education in full-time institutions or a cold plunge into the labour force is hardly a worthy social response to the complex abilities and aspirations of the young adolescents of today.
- exposure to work or other active social experience leads in many individuals to a crystallisation of personal consciousness in terms of motivation, ambition, hope and will--why distribute all the educational opportunities before this takes place?
- for many young people today the world beyond the school is a strange and somewhat fearful place--more bridges are needed.

- although the links between education and society today are generally conceived of in terms of education for specific careers, many people develop in an entirely different direction after their entry into work.
- women are in a particularly difficult position because we educate them more and more, and then face them with the agonising choice between family and career.
- there is a rapidly growing number of professional middle-aged casualties because qualifications fall behind the demands of economic and technological change.
- retirement is a serious personal crisis for many individuals, for which some form of educational preparation is clearly needed.

Taken together, these problems throw serious doubt on whether educational structures and opportunities have changed sufficiently for the new conditions of work and social life, and the more varied patterns of individual development that people now wish to follow. To develop the educational system as if its main task is to turn out a pre-determind set of "educational products" for the economy is an over-simplistic view of both the economy and the educational system.

Education and the Economy

All would agree that there must be some sort of a fit between educational output and the needs of the economy. And yet, despite the rapid development of the economics of education, that fit has never been worse, as witnessed by the employment problems of school leavers and university graduates. The fundamental reason is that in open, democratic societies, the social demand for education is only partly responsive to the labour market for qualifications. It translates the hopes and aspirations of individuals and families for the vaguely perceived future, for equality, and for personal realisation. It is a cat which will always jump out of the bag of economic forecasting.

Is the answer then to improve the fit by better information and guidance about careers and their relationship to educational qualifications? Obviously, this is one sensible thing to do, but the real issue surely is that the choices must be changed. If the fundamental option for young people remains as today--i.e. choose higher education and the income and status that go with it, or opt for work and proceed to the other side of the track--then of course the social demand for education will pile up beyond the capacity of the economy to absorb it. Relative prices of educated and uneducated manpower may adjust, but are not the social and individual costs of this adjustment too high to justify the Clapham Junction approach to social selection via the educational system?

Moreover, changing social and industrial conditions call for some form of education and training as a necessary service to enable the continuing development and adjustment of the individual. If "participation", "democratic management", "adaptability and mobility" and "creativity" in work--all slogans of the contemporary industrial society--are to be meaningful, is not access to education and training one of the indispensable conditions of work in a modern society?

There are certainly signs of a development in this direction if one may judge from the enormous growth of informal, adult education, which is a consequence of private demand for adult education opportunities, action

by public authorities to develop a system of continuing education, and collective bargaining between employers and trade unions. This process will certainly go on, and it no longer seems possible to treat the formal educational system for youth and the informal education and training opportunities for adults as if they belong to two different worlds. Only if there is much closer co-operation between the public authorities, industry and commerce, the trade unions and other social institutions will it be possible to create the more complex--but also more realistic--recurrent educational system of tomorrow.

In such a system, the possibility for individuals to go into work or other social activities without sacrificing later access to education, with educational opportunities spread out more realistically over the life-span, probably offers the best hope of inter-connecting the educational and the economic system. For under such an arrangement individuals would be able to move into and out of the educational system according to the development of their careers and social aspirations. They would be doing their own forecasting, on the basis of their knowledge and practical experience.

Recurrent Education and Education Equity

The equity issue logically follows the economic issue because access to education and access to income are obviously linked. The idea of society as a meritocracy based on ability may be seen as a response to disillusion in the contribution of political ideologies to transforming income and social structure. "If someone has to win, may the best man or woman win--thanks to equal access to education..." Equally, "if we the parents are unequal, at least our children will be more equal--through education..." These are the fundamental social aspirations which drive on the demand for education. Yet we now have to admit that despite the vast growth of education in the last two decades, education has not made the expected contribution to social equality.

The response to this persistence of inequalities does not lie in giving up education as a tool of redistribution, but in relating it more effectively to the other relevant policies, and thereby strengthening its effective role in equality. The struggle for equity has to be in terms of many different policies and penetrate more deeply into the life cycle. We should break the monopoly of the 16-19 age group on access to higher education--it will always favour the children of the existing social elites; spread the <u>right</u> to education to the adult, and in particular the early adult years; encourage firms, trade unions and public administration to accept responsibility for developing individuals through education and training; allow more flexible procedures for acquiring professional qualifications. These are some of the steps that are needed if education is to continue to promote social equality. If social mobility in the nineteenth century came from a self-made man, and in the first half of the twentieth century from the educated child, why not now the additional avenue of young adults, men and women, through access to a right to education which extends over a good part of their working lives?

Recurrent Education and Pedagogy

But if young adults are to become one of the main clienteles of the edu-

cation system, there would need to be a break with existing pedagogical traditions. If there is one pedagogical truth it is that animals learn only from practice, whereas human beings learn from theory and practice. Yet this basic principle is often neglected in education, because of the separation between academic and vocational education, and because of the divorce between theory and practice. As a consequence the schools and universities are unnecessarily isolated from the surrounding community. There is a lot to be said for rigorous intellectual standards, and for schools and universities which are to some extent critical of the existing society, but none of this contradicts the reality that children and young people assimilate theories better when the practical implications are understood. The separation of knowledge from the real world is a nonsense, and for many children a sure path of failure. This is precisely one of the reasons for which schools and universities are becoming discredited as institutions of learning. The "deschooling" movement is a reality in some countries because of a loss of confidence in traditional pedagogies to compete with the learning experiences outside the school.

Our conclusion is that many more bridges must be created between the school and the real life around, between the formal educational system and training activities and experience in industry, and between the learning and doing parts of the individual's process of development. This can only be achieved if pedagogical functions are recognised as existing in all social institutions, as opposed to being the monopoly of schools and universities.

The Main Alternatives

Thus we cannot ignore the possibility that the traditional school and university will gradually fade in importance. Faced by the problems of the mass education system towards which many countries are now rapidly moving, the "deschoolers" argue for the school as we know it to be abandoned for learning in the real world: the community itself becomes the school. On the other hand, the traditionalists argue for a return to a more selective and elitist educational system which would maintain intellectual standards and protect the moral values which education has traditionally conveyed. In some countries there is a mixture of the two approaches, in that the less able children are to be "deschooled" as a means of protecting educational standards for the rest.

Neither the "deschooling" nor the "elitist" approach represents realistic alternatives for the future. The advocates of the former ignore the reality that the complicated industrialised societies in which we live could hardly survive without an organised educational system to give the young access to knowledge and skills. The latter fail to appreciate that educational growth is an integral part of the global process of growth. It is a socio-economic phenomenon, in the sense that, as levels of personal and national incomes rise, new social groups aspire to educational levels which were formerly the prerogative of more privileged classes. The trend towards a democratisation of education is irreversible.

But why not be realistic and give full weight to the dramatic growth of training and education as part of active life which is taking place al-

ready in most countries? Why not relate this to basic education as part of a coherent system of educational opportunities and responsibilities, linked with new and more feasible patterns of working life and social participation? Some form of recurrent education does indeed seem to be the only viable alternative. Of course, it would be naive not to recognise that a system of recurrent education could only be a gradual development, co-existing with further extensions of the traditional educational system. The essential point is that there should be an option to link the two and make them responsive to a common set of objectives.

If recurrent education can be looked upon as one potential response to the problems of equity and quality of life in the increasingly urbanised, organised, technologised industrial societies of the latter end of the twentieth century, with continued economic growth offering the possibility of a social right to continuing development and opportunity for the individual, what would be the essential components of policies for achieving it?

Policies for Change

Recurrent education must be seen as more than continued, life-long or adult education, since it implies a new pattern of educational opportunities which affect the structure of the basic educational system. This pattern of opportunities cannot be made real unless both the formal educational system and training opportunities in adult life are seen as part of an overall commitment of policies to providing renewed life chances over a significant part of adult life. There is a consequent need for a much closer interaction of all social policies affecting life chances: educational, labour market, social, income distribution.

We are thus led to the conclusion that a system of recurrent education could only emerge if there is closer coordination of policies between the various public authorities involved (educational, labour and social) and if the responsible social groups (employers, trade unions, teachers and parents) are brought into the process of policy formulation. In this sense recurrent education is a typical problem of modern government, in that it defies the classical, "vertical" divisions of policy, and necessitates some form of participation by the interested parties in the decision-making process. Only in this way could such a profound social change be energised and implemented.

As for the specific measures, the following would appear to be a sine qua non of success:

- Since the crucial point in the process of social selection is in educational opportunities in the 16-19 age group, a reform of upper secondary education is indispensable. The crucial question here is whether, in the future, resources will be allocated not only to extensions of the school leaving age in the traditional system, but also to developing a wider and more flexible range of options for young people, with subsidised work experience or organised social service as a component of learning situations.
- Such a reform could not succeed unless employers take a more constructive view of employment prospects and career patterns for young people. The forced choice between military service, the university and boring repetitive jobs is a major

source of present difficulties.
- Policies for upper secondary education should be geared to the notion of a right to voluntarily deferred opportunities for higher education, within a reorganised and more flexible post-secondary system.
- This right would need to be translated into real opportunities by appropriate social, labour market and financing policies which provide incentives to participate in recurrent education.
- The structural changes envisaged will fail unless reinforced by new pedagogies which effectively combine theory and practice, as part of a learning process more meaningful for people with practical as well as academic motivations.
- This implies much more intensive interaction between educational institutions and the community, and the acceptance of pedagogical functions by a much wider range of social institutions.
- Post-compulsory educational facilities (and not least the universities) must be open and geared to the needs of both young people and adults.

NOTES

[1] From: *The OECD Observer*, No. 64, June, 1973

[2] The Organization for Economic Co-operation and Development, Paris.

ADULT BASIC EDUCATION AND BTSD

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Adult basic education refers to educational programs designed to prepare individuals to function adequately in a given social framework.

Implicit in this definition is the understanding that "to function adequately" and "a given social framework" are terms with no absolute meaning; that is, they must be defined relative to a specific situation. As an example, adult basic education in a developing African nation may not bear much resemblance to a similarly named program in Canada. Generally speaking, adult basic education programs are associated with the development of functional literacy; however, in Canada level of basic education is generally between grade eight and twelve depending on the circumstances.

In Canada, adult basic education is manifested in the BTSD program. In fact, the two terms are often used synonymously.

BTSD programs are designed to meet a very worthwhile objective: to upgrade the educational qualifications of unemployed or underemployed individuals to meet the academic requirements of further training courses. The scope of this objective is currently being interpreted to include provision of those life skills necessary for successful functioning in a Canadian setting. In this sense, adult basic education and BTSD programs have much in common.

The two programs differ, however, on one fundamental point. An indication of this difference can be gleaned from an analysis of their respective names--adult basic education and Basic Training for Skill Development. The point is that there is a fundamental difference between education and training.

The distinction is one of intent. Education is intended to prepare an individual to perform undefined functions in unpredictable situations. Training is intended to prepare an individual to perform defined functions in predictable situations.[1]

It may be argued that in a BTSD context the difference is superficial--merely semantic. The rationale commonly proposed for the different terminology is based on a principle contained in the British North America Act. Section 93 places education under provincial jurisdiction. In an effort to avoid any connotation of infringement upon provincial rights, the federal government deliberately uses the term "training" in all its references to programs funded under the Adult Occupational Training Act, even though they are administered by the provinces.

As reasonable as it is, however, this argument begs the question. The matter goes beyond semantics. The intent of a program necessarily affects its design; it affects the objectives and the content of the program. In the matter of training,

the identification of objectives and selection of content should be based on an analysis of the specific functions to be performed and the specific situations in which they are to be performed. For the purposes of education, the identification of objectives and the selection of content should be based on their having the widest possible significance and greatest possible explanatory power.[2]

A translation of this theory into practice can be seen from an examination of current BTSD programs and their proposed development. To do this, it is necessary to examine them in context. BTSD programs are only part of a structured training framework established by the Department of Manpower and Immigration. This framework is intended to allow for the selection of specific training programs designed to meet the needs of individual Manpower clients. At present, the design of training programs, including BTSD programs, is based on the assumption that a definite occupational goal can be identified before the program is charted. Having accepted this assumption, the subsequent effect on BTSD programs is very logical. In theory, a comprehensive effort is made to identify those academic skills necessary to succeed in the vocational course which will follow BTSD, and the student is scheduled to receive instruction in those areas in which he has a demonstrated weakness. The objectives and content are based on a projection of specific functions which are to be performed in specific situations.

There is at least one good reason why this cannot be done and at least two others why it should not be done. It cannot be done because no person who is operating below an accepted functional level can be expected to demonstrate the aptitudes, capabilities, and interests that enable a single occupational goal to be positively identified. There are too many variables which may change during the basic education process. One reason it should not be done is that labour market conditions necessitating another vocational change could arise sometime after the completion of the training program. If this happens, an individual should have the ability to enter directly into a new phase of training. More importantly, however, is the fact that such action violates a basic principle of education: that part of the educational process is expanding one's intellectual horizons. As these horizons change, as the individual gains an awareness of more alternatives, as his interests and capabilities change it is reasonable to assume that his choice of a vocational goal may change. Rather than inhibit the possibility of altering commitments at this point, an educational program should facilitate it.

Basic Training for Skill Development programs have achieved notable success in their short history. They have been a factor in helping Canada move closer to realizing its social and economic potential. However, in order for BTSD programs to become completely compatible with adult basic education programs, they must relax their emphasis on occupational goals.

NOTES

[1] Johnson Mauritz, Jr., "Definitions and Models in Curriculum Theory", *Contemporary Thought on Public School Curriculum*, Short, E.C. and Marconnit, G.D. (editors), Dubuque, Iowa: William C. Brown Company, 1968, p. 49.

[2] Ibid.

Editor's Note

In the view of this Department, Mr. Lynn is not exactly correct in implying that a specific occupational goal must be identified before a trainee can enter BTSD under Manpower sponsorship, although departmental practice has been to record such a goal whenever feasible.

The need to assist the individual to articulate his own interests and aptitudes and to set his own goals in the course of training has become a recognized necessity.

The Basic Job Readiness Component of BTSD has as one of its aims the expansion of the vocational horizons of clients having low levels of formal education. This clearly means that many trainees in such programs will refine or change their aspirations as their abilities and awareness increase.

The distinction between training and education is indeed not merely a semantic one, but neither is it a simple dichotomy. Mr. Lynn's call for a relaxing of the emphasis on occupational goals does not necessarily mean that BTSD should abandon vocational concerns, but it does raise some important questions about the way in which this form of adult training should serve its aims.

SCIENCE PROGRAM DEVELOPMENT IN NEWFOUNDLAND AND LABRADOR

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The program described in this article was the first individualized science program to be incorporated into the BTSD. The program has as its base, a core program which, although it is self-contained, can be expanded into one of three completion programs. Details of these programs are given together with the units and modules comprising them.

Introduction

Science has been a part of the BTSD Program in Newfoundland and Labrador for almost five years. Although the curriculum and methods of teaching have changed in this time, the objectives remain the same:

(a) to prepare people as quickly as possible to embark upon courses of vocational training, or occupations, which require a certain basic education;
(b) to help people in their understanding of the confusing world of technology;
(c) to give the individual a fundamental understanding of the material of his surroundings.

The first objective is essentially dictated by the Department of Manpower and Immigration. The second two are more "educational." You will note the word "understanding" occurs in both. The operational objectives pundits will, no doubt, squirm at the sight of that word. They may rest assured that their consolation will be found later in this article.

The most important factor in the design of a teaching program is the students, and their influence can be felt in the following ways:

(a) students enter continuously. The program must be such that they can work individually, as opposed to working in a class group;
(b) students have widely differing interests, backgrounds and rates of work. This also means that they must be able to work individually;
(c) students do not have a clear-cut trade objective. The program must be broad enough to provide for a reasonably wide choice of trades, but not so broad as to be irrelevant for students whose trade objective is clear.

A further factor is the nature of the subject itself. Because science and technology are fluid subjects, the program must be such that change can be made without complete overhaul.

Finally, evaluation is necessary, both of the student and the program content.

The Philosophy of the Program

Although science is often regarded as an academic study, it does concern the material of our environment, its properties, and the influence it has on our lives. In the world of trade, industry and commerce, science is very much concerned with material, mechanisms, hygiene and personal security. Because of this, a science program must

be very practical, with the emphasis on experience rather than performance, observation of how things really are, rather than theory, and today's environment, rather than history.

Unlike most school science programs, whose philosophy is idealistic, and whose terms of reference vague in the extreme, the BTSD course has a clearly defined set of parameters. Its content must be relevant to the student when he enters, and to the trade or occupation to which he aspires. Because of the special requirements of the BTSD student, the program should consist of items that demand a short attention span but yet are long enough to retain reasonable coherence with the rest of the program. It must be individualized, to permit continuous entry, progress and graduation. The objectives and procedures must be clearly stated, although we have allowed some relaxation of rigid definitions, in the interests of program development and flexibility. In applied science, also, experimentation and the construction and study of practical situations must form part of the course content.

Structure of the Program

The over-all program was structured so that the student would be faced with the minimum of alternatives. Furthermore, all students were placed in a core program. This delays the need for selection until they have had time to investigate their opportunities more fully--either through discussion with their fellows, or through their work in communications.

Three completion programs were designed so that students could choose a course allied to their trade. For this purpose trades were grouped as follows: technical, commercial and biological.

The objectives were written, as far as possible, in "operational" terms. Such a practice, however, can lead to a pedantic, almost legalistic introduction to an objective. Furthermore, it leaves no room for variation or inventiveness by student or teacher. Sometimes, the writers or committee were keen for an opinion from teachers and students in the field. In other cases, the text or worked examples revealed more information about the objective. Although not all activities and experiences have a clearly definable objective (in behavioural terms), it is felt that they are worthwhile; these are most difficult to evaluate. Procedures for evaluation were left to the discretion of the teacher in the field. Specimen evaluation sheets were produced, but it was suggested that maximum use be made of direct evaluation on work done, or projects produced by the student.

The course is broken down into a core and completion sections, and each is further reduced to units, topics and finally pages. This facilitates change, since topics can easily be removed and inserted. Feedback is invited, so that teachers may alter program items, and share observations regarding evaluation methods and standards.

In the actual writing, units were allocated to specific authors. This ensured coherence within the topic. These authors wrote under the advice of the Provincial Committee, and worked around the same (huge) table. Hence their title "Principal" author. Supportive texts and references were used.

Books and Materials

The program as printed consists of statements of objectives, a passage of reading and generally an experiment, followed by suggested references. Whenever possible several alternative references have been given so that teachers or students may select a preferred text. The fact that references are provided should not confine students or teachers to these suggestions only.

The objective, with regard to books, should be to build up a science room reference library, so that students develop library skills, e.g., critical reading and selection skills, rather than a good memory for facts.

If science concerns our environment, then the materials for its study should be available from our environment. How often do we find a specially designed bunsen burner, tripod, gauze and graduated beaker used only for boiling water? How rarely do we find a common electric kettle in a science room, and yet it has other more "scientific" applications than heating water. Some specialized materials are needed, especially in the field of instrumentation, and extending human senses. Electrical meters and microscopes are examples.

Because the program was written in a context of laboratories already equipped in a largely traditional way, much experimental work is based on this type of equipment. You will still find the "ball and ring" experiment, for example. This should not deter the teacher from using the equivalent experiment described in "UNESCO Source Book for Science Teachers" using a nail and home-made gauge. Neither should the time and effort making equipment be denied the student. If he is eventually to be a tradesman, he should surely manipulate some common materials during his basic education.

The first task which the Committee chose was to determine the over-all program structure. This is illustrated on the following page.

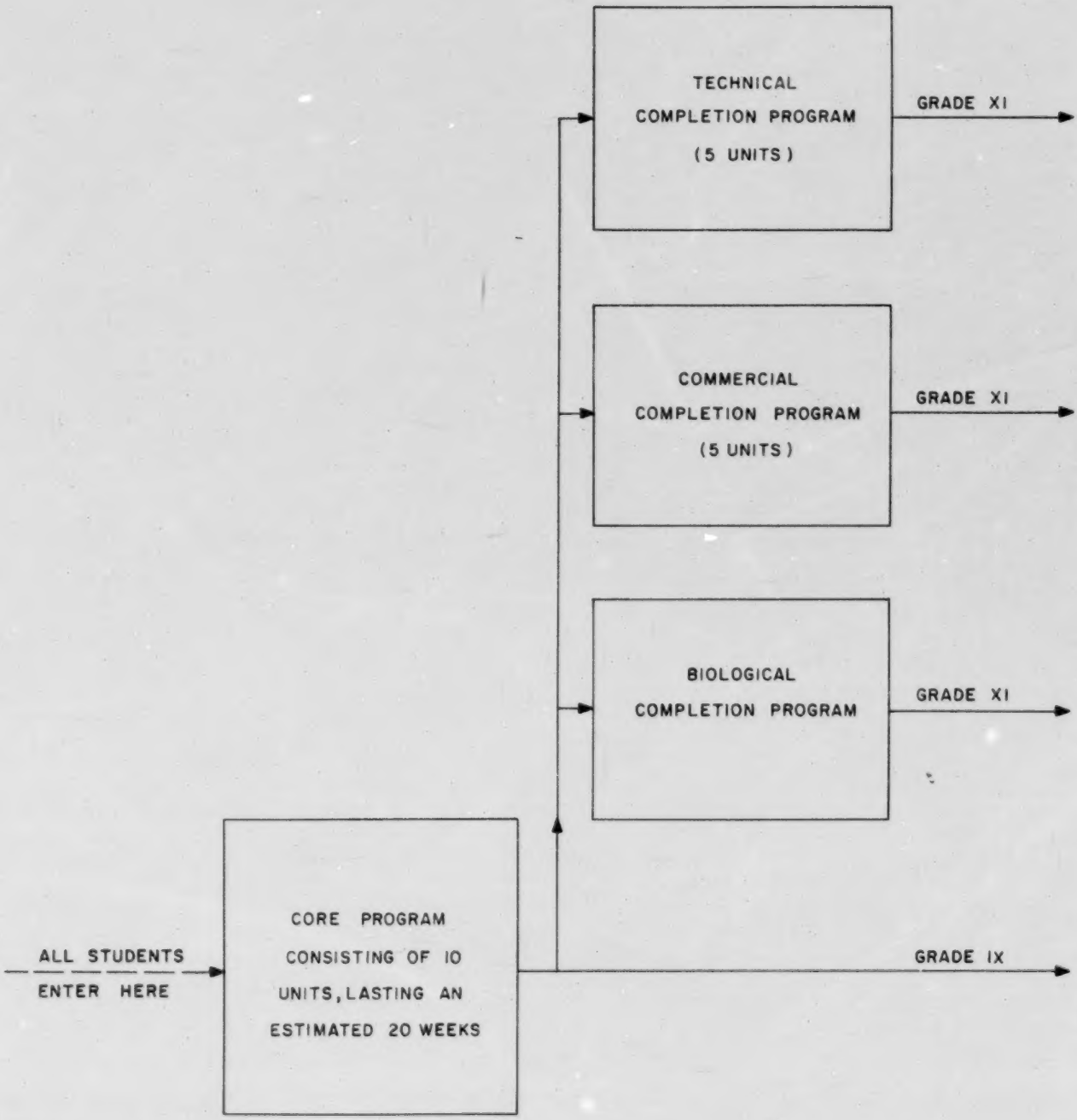
All students start in the *core program*. On completion a student may be awarded Grade IX and enter training directly into the following trades:

Barbering
Bricklaying
Carpentry and joinery
Cooking (commercial)
Dressmaking and sewing
Heavy equipment operation
Heavy truck and semi trailer operator
Homemaker's assistant
Motor vehicle repair
Plumbing and domestic heating
Pottery
Weaving

Students may enter the *technical program* if they intend to progress to training in the following trades:

Aircraft maintenance mechanic
Diesel mechanic (marine)
Drafting
Electrical (basic)
Electronics (basic)
Electrical (electric power utilities)
Gas and diesel mechanics
Construction technology
Electronics technology
Surveying
Forestry
Heavy Equipment repair
Machinist trade
Millwright

PROGRAM STRUCTURE



Motor vehicle repair (mechanical)
Steamfitting and pipefitting
Refrigeration
Welding (arc and gas)
Electrical technology
Mechanical technology
Engineering technology

Students may enter the *commercial program* if they intend to progress to training in the following trades:

Beauty culture
Clerk-accounting
Clerk-typing
Bookkeeping
Secretarial science
Clerk-hotel front office
Accounting
Business administration
Hotel administration

Student may enter the *biological program* if they intend to progress to training in the following trades:

Medical laboratory technology
X-Ray laboratory technology
Nursing

The reader will observe that there is no Grade VIII or X, although in Newfoundland and Labrador several trades require these grades. At the time of writing, there has been relatively little complaint from anybody concerning this "deficiency." A few students needing Grade VIII did ask for an equivalent grade requirement to be defined, and there is a possibility that this provision may be re-introduced.

The Committee omitted Grade X because it could see no logic in the differing levels demanded for entry to trades that were very similar. It was also aware that the educational prerequisite demands were really little more than screens to reduce the numbers applying for seats. The reasons for eliminating Grade VIII were that there was little difference between VIII and IX and only two trades demanded Grade IX. Furthermore, there has been a trend to "upgrade" trade requirements. Barbering, which required Grade VIII, now requires IX. We therefore decided to get a jump ahead. Such is the lack of real meaning in grade numbering.

The next task for the Committee was to outline the program in terms of content. This list shows only the kind of thing to be included. It does not indicate "standards, conditions, or depth of study." To define these, behavioural objectives are, strictly speaking, required. The list of topics follows:

Core Program

S-U1 Direct Measurement
- T1 English Linear
- T2 English Area
- T3 English Volume
- T4 English Weight
- T5 Metric Linear
- T6 Metric Area
- T7 Metric Weight
- T8 Scale Reading

S-U2 Heat
- T1 Molecular Theory
- T2 Expansion
- T3 Thermometers
- T4 Heat Units
- T5 Heat Transfer
- T6 Insulation
- T7 Change of State
- T8 Link between Heat & Work

S-U3 Chemistry
- T1 Atoms & Molecules
- T2 Atomic Theory
- T3 Periodic Table
- T4 Water

T5 Air
T6 Combustion
T7 Oxidation
T8 Air Pollution
T9 Acids & Bases

S-U4 Nature of Materials
T1 Density & Specific Gravity
T2 Fluid Pressure
T3 Capillary Action & Surface Tension
T4 Solutions
T5 Air Pressure
T6 Siphons & Pumps
T7 Strength of Materials
T8 Crystallization
T9 Casting & Soldering

S-U5 Safety
T1 Fire Fighting & Safety
T2 Industrial Safety
T3 Laboratory Safety
T4 Eye Safety
T5 Electrical Safety
T6 Hunting & Fishing Safety
T7 First Aid - Breathing
T8 First Aid - Bleeding
T9 First Aid - Shock
T10 First Aid - Burns & Frostbite
T11 First Aid - Poison
T12 Survival Training
T13 Highway Safety

S-U6 Biology
T1 The Microscope
T2 The Cell
T3 Yeasts, Molds, Bacteria
T4 Reproduction
T5 Human Anatomy
T6 Physical Environment
T7 Biotic Environment

S-U7 Hygiene
T1 Food Preparation & Storage
T2 Personal Hygiene
T3 Water Purification
T4 Sewage Disposal
T5 Garbage Disposal
T6 Proteins & Carbohydrates
T7 Vitamins & Minerals
T8 Alcohol, Narcotics & Tobacco
T9 Contagious Diseases

S-U8 Waves
T1 Terminology
T2 Sound
T3 Speed of Sound
T4 Echos & Radar
T5 Pitch of Sound
T6 Electromagnetic Spectrum
T7 Light
T8 Reflection
T9 Refraction
T10 Color

S-U9 Mechanics
T1 Force-Work
T2 Inertia
T3 Friction
T4 Center of Gravity & Equilibrum
T5 Mechanical Advantage
T6 Levers (M.A.)
T7 Slopes (M.A.)
T8 Wheel & Axle & Winches
T9 Pulleys
T10 Hydraulic Jack

S-U10 Electricity
T1 Static Electricity
T2 Simple Circuits
T3 Practical Electric Circuits
T4 House Wiring & Safety
T5 Voltage & Voltmeter
T6 Current & Ammeter
T7 Ohm's Law
T8 Power
T9 Cost of Electricity
T10 Batteries

Technical Program

T-U1 Precision Measurement
T1 Exact measurement
T2 Micrometer
T3 Vernier Caliper
T4 Tolerance

T-U2
T1 Factors Affecting Boiling
T2 Specific Heat

T3 Heat of Fusion & Vaporization
T4 Expansion of Solids & Liquids
T5 Expansion of gases & the Gas Laws
T6 Gasoline Engines
T7 Diesel Engines
T8 Turbine Engines

T-U3 Mechanics
T1 Resultant & Component Forces
T2 Moments & Equilibrium
T3 Friction & Work
T4 Power & Energy
T5 Gears, Screws, & Compound Machines
T6 General machine problems
T7 Inclined plane, wheel & axle
T8 Pulleys & Screws
T9 Velocity Vectors
T10 Motion

T-U4 Electricity
T1 Magnetism
T2 Electromagnetism
T3 Electrical Meters
T4 Electromagnetic devices
T5 Alternating Current
T6 Combination circuits
T7 Electricity generation
T8 Rectifiers

T-U5 Chemistry
T1 Atomic Theory
T2 Chemical Formulae & Equations
T3 Iron
T4 Aluminum & Copper
T5 Fuels
T6 Alcohols

Commercial Program

C-U1 Lighting
T1 Nature of Light
T2 Intensity
T3 Direction
T4 Structure of Eye
T5 Common Defects of Eye
T6 Color
T7 Quality of Light

C-U2 Photocopying
T1 Photography
T2 Blueprinting
T3 Electrophotography

C-U3 Solvents, their Uses & Effects
T1 Meaning of Solvent
T2 Common Solvents
T3 Uses of Solvents
T4 Effects of Solvents
T5 Storing Solvents

C-U4 Personal Hygiene
T1 Posture
T2 Cosmetics
T3 Good Grooming

C-U5 The Senses
T1 Senses

Biological Supplement

B-U1 Biology
T1 Cytology
T2 Botany
T3 Zoology
T4 Conservation
T5 Genetics
T6 The Sense Organs

The program was then turned over to a group of teachers who decided on the behavioural objectives, and how the student was to reach these objectives. All of the teachers had been working on Adult Education programs. Some had tried various individualized approaches, and had experience in dealing with behavioural objectives.

In terms of logistics, the program had to be prepared and printed in one fiscal year. Much of the program structure, and some of the topics, were potentially available before the Committee formally gave its consideration and approval. The Committee was well supported by

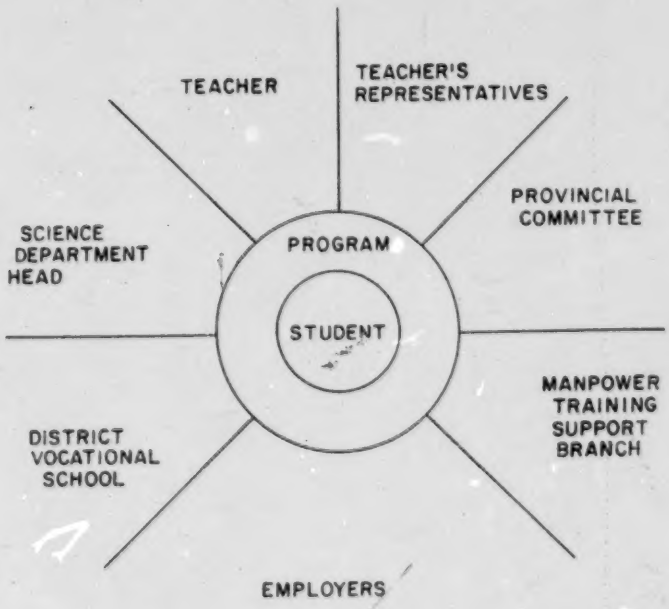
advisers, and the topic outlines were prepared out of Committee, and presented for their alteration. Despite this, it took some four days of Committee meeting to formulate sufficient policy for the program writers to start work.

Actual writing required about three months, with an average of five people working 30 hours per week. This was not sufficient time, and some sections of the program should be completly re-written. The writers were supported by one typist who worked 35 hours per week and more to keep up. Diagrams were hand drawn. Printing was done by a photographic off-set process. The material could thus be typed on plain paper. This is the easiest way to produce a program of this type, but it does almost preciude the use of colour pictures, although black and white photographs could be included.

The science program was intended to be used in fairly well equipped science laboratories which had been in operation for about four years. The philosophy also demanded an experimental yet relevant approach, one which utilized materials from the day-to-day environment, and which was concerned with the occupational expectations of the students.

The communications structure that should develop is illustrated below:

COMMUNICATIONS STRUCTURE



The student is the "customer," and is therefore the central figure. He is served directly by the program. Note that this goes directly in the face of traditional teaching procedures, which put the onus of responsibility on the teacher, and blames him when the student fails. Blame invariably comes from the student, sometimes (oft-times?) from the teacher's supervisors, and frequently from within the teacher himself.

By putting the student fairly and squarely in the centre, and stating to the student exactly what he has to achieve, it is then up to the student himself to obtain the most out of the program. The teacher's responsibilities are then to meet the demands of his student, to obtain the optimum results. If the student fails, then we must look at:

(a) the student
(b) the program
(c) the teacher's contribution to the program

in that order.

In this frame of reference, the teacher is no longer alone. He has all the other components of the outer ring of the communications structure. So far, not all elements have actively influenced the program.

Until recently, the Department Head has been the intermediary between the program and the other elements of the outer ring, which is only to be expected in the traditional pyramid structure so often seen in educational administration.

All program needs filtered in to the Department Head, and emerged as program changes. For the most part the teachers were not responsible for the performance of their students, and evaluation was done by a central examination body.

The circular pattern has made the program more accessible to more people, and has given teachers the opportunity to treat their occupation more professionally. Feedback is much more clearly defined, and change is possible without disruption.

CLIENT FOLLOW-UP

R.F. Gaffney

Alberta Testing and Research Specialist Vocational Centre

This summer (1973) under the auspices of the Alberta government's Summer Temporary Employment Program, we at Alberta Vocational Center (AVC), Calgary, conducted a follow-up study for a sample of our former students. It was our intention to attempt to answer two questions: What becomes of our students?, and Who tends to succeed?

A stratified random sample (N=200) was drawn from the total number of adult students who were registered in the Certified Nursing Orderly (CNO) program, the Business Education (Bus. Ed.) program and the Vocational Preparatory (Voc. Prep.) program for the period April 1970 to June 1972 (N=710). We attempted to contact and interview as many of the sample as possible. One hundred and fourteen of the total sample of 177 were in fact interviewed.

The scheme utilized was to consider the students prior to, during and subsequent to their enrollment in our programs. We went on to consider if and why a former student dropped out of a program or field of work. For each client a subjective judgment was made as to whether or not he/she had succeeded in attaining his/her goal.

Thirty-four of the initial 40 registered in the CNO program were interviewed. Of these, 9 dropped out before completing the actual program, while 25 completed it. Subsequently, 6 of the CNO's have dropped out of that field of work.

Of the original sample of 50 Bus. Ed. students, 28 were interviewed. Of these, 10 dropped out of the program before completion; 9 dropped out before they had gained sufficient skills to become employed. One girl, who dropped out subsequently found employment that utilized the skills she had learned in the program. The remaining 18 were qualified for employment as a result of their training, and all but one utilized the skills gained, in subsequent employment.

Forty-nine of the original sample of 87 Voc. Prep. students were interviewed. Of these, 38 successfully completed their program, while 11 dropped out before attaining the minimum prerequisite skills for the vocation they had chosen.

By way of a summary, four observations that were consistently noted warrant specific mention. 1) For the sample of students we considered, those persons who were receiving social assistance at the time of entry had the same chance of success as those who were not. 2) Those persons who had young children tended to succeed less often than those who did not. 3) Students made advances to reaching their stated occupational goal. 4) The majority of all students surveyed stated they would recommend the program to a friend.

This brief article is an abstract of a full report that documents the

specifics of our project. The report includes detailed information for each program considered. For the interested reader it is available upon request from author.

Editor's Note

Researchers are cordially invited to send in abstracts such as this.

READERS' NEWS

Gary Thornley, of Spence Bay, N.W.T. talks about the response to "Fluency First"

"Our home is now fully set up as a school, and attendance is rapidly picking up for the various projects and activities. The "Old Guard" of my English fluency students are back, plus quite a new crop of people who didn't attend in the spring. Recently I have been holding a series of classes on food preparation with the students (about 25 regulars) learning the words and constructions connected with buying, cooking and serving food. After each class we eat the props! The idea behind it is that if one learns to say "Please pass the cheese and pickles" and someone is there to actually pass them, there is an immediate and realistic reward. Lots of fun and laughter.

We are also working on a newspaper for Spence Bay: contributions are coming in--some stories about the early days of Spence Bay and the Netsilik River, opinions about the NWT government policies, stories by the school kids, "outside" information and cartoons. We hope to print the first edition in middle or late October. I am working with four people on the paper's format and material. It is proving to be a natural extension of the literacy program.

We have started a library in our home, and the few books we have are circulating pretty well--particularly the picture books and those written in syllabics."

Fluency First is a course to teach oral English as a second language to people who are not literate in any lang-

uage. Dana Mullen is responsible for the Fluency First program development which was started under the auspices of Saskatchewan NewStart. For further information write to Dana Mullen, c/o TRANDS. Department of Manpower and Immigration, Prince Albert.

"Happiness is finding you are not so dumb after all." Motto: Fred Ryan's School, Toronto.

The Adult Day School, or as it is more affectionately known, Fred Ryan's School, is located in the basement of 674 Dundas Street, West. Founded in 1969, it is one of the Metro Social Service Shelters.

The school is one of the very few full-time, non-government sponsored A.B.E. institutions, and despite its facilities which are "reminiscent of a Dickensian workhouse," the place exudes a certain charm and warmth of character, not felt in every A.B.E. institution.

We hope to have an article on the school in the next issue.

Courses for ABE instructors at University of Saskatchewan, Regina.

The University of Saskatchewan, Regina Campus, in co-operation with the Department of Continuing Education, offered two courses this summer specifically for Adult Basic Education instructors:

1. "Introduction to Adult Basic Education";
2. "Principles of Curriculum Development in Adult Basic Education."

The instructor for both courses was Mr. John Lipp, Provincial Co-ordinator of Adult Basic Education, Department of Continuing Education, Regina, Saskatchewan.

The courses were developed primarily by the Department of Continuing Education and were related directly to Adult Basic Education in Saskatchewan. Fifty Adult Basic Educators--both experienced and new--successfully completed the classes. The University has agreed to offer these courses again next summer and is considering proposals for other courses related to Adult Basic Education. It is hoped that education students would eventually have the opportunity of obtaining a B.Ed. degree with a major in Adult Basic Education.

Life skills orientation program for Regina staff

An in-service training program was presented to staff members of the Vocational Education Division, Wascana Institute, Regina, during the month of August. This was to serve as an orientation to the theory, content and methodology contained in the Life Skills Course. Mr. Paul Curtis from the Training Research and Development Station, Department of Manpower, Prince Albert, (formerly Saskatchewan NewStart), supervised the 10-day orientation program. He was assisted during the course by life skills instructors of the Vocational Education Division. Approximately 35 instructors from Regina, along with several instructors from adult training centres in other parts of the province, attended.

Saskatchewan Adult Educators - Transition

- P. Kalyn, former Program Consultant, Department of Continuing Education, has become Supervisor of Extension Programs with the Prince Albert Reg-

ional Community College.

- E. Tremblay, former Supervisor, Fort Qu'Appelle Vocational Centre, has joined the staff of the Prince Albert Regional Community College as an instructor in Court Worker Training.
- K.A. Johns, former Chief, Trade and Occupational Training, Department of Continuing Education, has left Saskatchewan to join the Unemployment Insurance Commission, Edmonton, Alberta.
- I.J. Wilson, formerly Principal, Kelsey Institute of Applied Arts and Sciences, Saskatoon, has been appointed Deputy Minister, Department of Education, Saskatchewan, effective November 1, 1973.
- J. Lipp, former Program Consultant, Department of Continuing Education, has been appointed Provincial Co-ordinator, Adult Basic Education and V.R.D.P., Department of Continuing Education, Regina, Saskatchewan.

Some News from TRANDS

A course for trainers of life skills coaches was conducted from October to November 2 by Jim Vickaryous at the Training Research and Development Station (TRANDS) in Prince Albert, Saskatchewan. As a course being presented experimentally for the first time, the number of students was limited to 12 people who had already had training and experience as life skills coaches using the TRANDS life skills program, or the equivalent. Potential trainers representing various department, institutions and organizations in British Columbia, Alberta, Saskatchewan, Manitoba and Ontario attended the course.

Native Press

Native Press is an excellent newspaper written for and by the Native People of the Northwest Territories.

It is published by the Indian Brotherhood of the N.W.T., Box 2338, Yellowknife.

The All-Ontario A.B.E. Group

A group of Ontario adult basic educators are exploring the possiblity of organising an Ontario association, now that the old Ontario Association for Adult Basic Educators has become defunct.

A prerequisite for the new association is strong representation and support from most, if not all, Ontario colleges, agencies and department involved in A.B.E. This is seen as essential if a co-operative and active venture is to emerge.

A Development Committee has been formed and will remain in existence until a final decision on the formation of an association is made.

Plans are being made for a spring conference with the Ontario Association for Continuing Education from whom invaluable assistance is being obtained.

For further information, write to: Mrs. Joan House, Niagara CAAT, Welland Vale Road, St. Catherines.

Yarrow (Achillea Millefolium)

"The Yarrow-plant grows profusely in Saskatchewan; in fact it grows like a weed all over the plains of the West ....." "Yarrow" is also the name of an interesting new quarterly published in Saskatchewan on adult education. For more information write to:

Chairman, Editorial Committee,
The Yarrow Quarterly
Vocational Education Division,
W.I.A.A.S.

Saskatchewan House Dewdney
Avenue West
REGINA, Saskatchewan

National CMTP Workshop

A National Workshop on the Canada Manpower Training Program was, at the time of writing, planned for Winnipeg from February 26 to March 1, 1974.

The Workshop was sponsored by the Department of Manpower and Immigration and had been developed in co-operation with training authorities of the prairie provinces. The Manitoba Department of Colleges and University Affairs had made the arrangements for the workshop.

A major topic to be discussed was the relationship between BTSD and Skill Training. The related subject of recurrent education (or training) was also to be considered and Mr. Gosta Rehn, the guest speaker from the Organization for Economic Co-operation and Development, Paris, was to speak on "Manpower Training in Europe and the Future of the Recurrent Education Concept".

Among other subjects to be discussed were occupational analysis, preparation for employment, the GED tests, generic skills and alternatives to full-time classroom training.

Program managers and technical experts from the provinces and territories, as well as their counterparts from the federal Department were expected to attend, and it was anticipated that the Workshop would lead to the preparation of concrete proposals for enhancing the effectiveness of training conducted under CMTP. The next issue of the BTSD Review will report on the conference and its outcomes.

International Council of Adult Education

The council is a unique, new, international organization on adult education. It emerged out of discussions held at the recent World Conference in Tokyo and is expanding rapidly into most countries of the world.

"Convergence", a periodical many of us are familiar with already, has become the main journal of the council. For more information write to:
Dr. Roby Kidd,
Secretary-General of the Council,
at P.O. Box 250, Station F,
Toronto, M4Y 2L5.

A Manitoba Adult Basic Education Outreach Program...

In Winnipeg, the Red River Community College Adult Basic Education program is offered at the main college campus, located towards the western outskirts of the city.

For the motivated person the travel time taken to attend classes at this location is well worth it. However, indications are that there is a group of hard core disadvantaged living around the northern fringe of the inner city area, who are reluctant to travel any distance outside their familiar "turf." Because of insufficient motivation, domestic and personal problems, and the natural disinclination for new, anxiety-causing situations, these people will not leave their own familiar surroundings to attend classes at relatively "distant" locations. As a result, A.B.E. operations are being planned on a needs basis for the inner-city area of Winnipeg. These will be of two types: satellite centres and storefront centres.

The Satellite Centres

These centres will be offering the three components of the colleges' A.B.E. program - academic subjects, personal and social skills and pre-occupational skills. The programs will be offered on a totally individualized basis whenever possible. The materials used will be those developed by the colleges, together with the Training Research and Development Station's (TRANDS) (Saskatchewan - Prince Albert) Basic Literacy for Adult Development (BLADE) and Learning Individualized for Canadians (LINC) programs. These satellite centres will offer academic courses up to the Adult Grade X level.

The objectives of these centres will be to provide persons with the necessary academic and related skills important for entry into employment, training on the job, skill training or further training. In some cases participants will be allowed to return for further training.

The Storefront Centres

Initially a single storefront centre is being planned which will be manned by 2 to 4 members of the A.B.E. staff support personnel from the college will be made available on a needs basis.

Persons manning the storefront centre will have to work with community groups and/or individuals in ascertaining needed programs and services. Since the staff in a storefront centre cannot themselves be experts in all the areas of participants' needs, they will have to seek and enlist the co-operation of agencies capable of providing the required services. Some programs and services storefront staff could arrange might be:

Services

1. Vocational or Career Counselling
2. Legal Aid Services
3. Medical and Dental Services
4. Services for the Aged

Programs

1. Day, evening and part-time academic programs
2. Programs on hobbies and recreation
3. Personal development programs
4. Vocational and career exploration programs
5. Programs on family and community life

A Profile of a Sample of BTSD Instructors

The Department of Manpower and Immigration recently conducted a survey of 458 BTSD instructors with the co-operation of seven provinces. They were British Columbia (54 instructors), Alberta (30), Saskatchewan (38), New Brunswick (47), Nova Scotia (126), Manitoba (93), Newfoundland (70). The survey was based on data for the reference period September 1, 1970 to August 31, 1971.

A summary of the data is given below.

Background

- 77 per cent of the sample is male.
- 69 per cent are 24-43 years old.
- 73 per cent have Grade 12 or less.
- 34 per cent have teaching certificates or licences.
- 39 per cent gave teaching as their most recent past occupation.
- 61 per cent have four or more years of full-time teaching.
- 68 per cent have up to three years BTSD teaching.

Present Instructing Assignment

- As major subjects:

  Communication, 32 per cent.
  Mathematics, 21 per cent.
  Science, 15 per cent.
  "Other" subjects, 19 per cent.

- As secondary subjects:

  Communications, 2 per cent.
  Mathematics, 13 per cent.
  Science, 6 per cent.
  "Other" subjects, 7 per cent.

- 62 per cent teach 26 weeks or more annually.

Terms of Employment

- 31 per cent have written contracts of employment.
- 57 per cent have no written contract.
- The majority of instructors were satisfied with their terms of employment, 16 per cent indicated dissatisfaction with their salary.
- 38 per cent had contracts of specific lengths up to one year.
- 45 per cent are required by their employer to give 1-2 months notice for termination of their employment.
- 17 per cent received a salary of $6,000 or less. (A small percentage of these were part-time.)
- 55 per cent received a salary of $6,001 - 10,000.

Professional Problems

- 42 per cent experience NO problems relating to the administration.
- 1 per cent experience NO problems relating to physical facilities.
- 10 per cent experience NO problems relating to technical aspects of teaching.
- 43 per cent experience NO problems relating to personal aspects of teaching.
- 3 per cent experience NO problems relating to the availability of resources.
- 56 per cent experience NO problems relating to the relations with professional colleagues.

A 4-point scale was used i.e., no problem, slight problem, average problem, severe problem.

Need for Professional Development

The greatest need for professional development was recorded in the following areas:

- Curriculum development, 57 per cent.
- Counselling and guidance of students, 56 per cent.
- Psychology of adult learning, 56 per cent.
- Audio-visual aids, 49 per cent.
- Individualized prescribed instruction, 46 per cent.
- Adapting instruction to the needs, interests and abilities of the students, 46 per cent.

Areas that least needed professional development were:

- Mathematics instruction, 18 per cent.
- Science instruction, 16 per cent.
- Planning lessons, 16 per cent.

The full report of this survey is available from the editor.

What Some Readers Think of the BTSD Review

A one-page questionnaire was recently sent to those readers who receive four or less copies of the Review and who are not staff members of the Department of Manpower and Immigration.

The purpose was

a) to up-date the Review mail-

ing list;
b) to obtain reactions to the periodical.

Twenty per cent (740) of those who receive the Review were sent copies of the questionnaire. Fifty-six per cent (416) were completed and returned.

There follows the main questions asked with responses in brackets:

(a) "In general I have found the Review excellent (29%), good (61%), mediocre (3%), poor (.2%), very poor (0%)."

(b) "I have read approximately 5% (.7%), 25% (12%), 50% (25%), 75% (32%), 100% (24%) of all the copies I have received.

72% of the respondents made specific comments; a cross-section follows:

- The Review is improving with each issue.
- Lacking any form of originality in its form of presenting material.
- More on continuing education especially on professional development of continuing educators.
- Excellent resource book.
- Articles seem to be good footnotes to boring academic thesis. We read it all before, but it is very couth browsing.
- Very suitable for our area of adult education.
- More contemporary reports, no rehashing of old material.
- Because of lack of time, the format could be in the form of short news items to inform the readers what goes on in all BTSD departments all over the country.
- The way you handle French-English is novel and commendable.
- Too theoretical for the general readership you seem to be trying to reach. They need to be providing solutions to everyday problems in classroom.
- A valuable aid to the instruction of adults.
- Articles (content) among the soundest and best in the line of educational research.
- Studies of a different college wanted each time, with the programmes being carried out there.
- How effective/not effective, IPI, CAI, etc. has been (or is) on BTSD students.
- Reports on problems and successes of A.B.E. programs in various Canadian centres.

The Editor would like to thank readers for their helpful responses and suggestions.

You are warmly invited to continue sending in your suggestions, comments and queries and, of course, your articles and other contributions.

Now See Hear!

Teaching is communicating. So if you are looking for a simple, uncluttered but nevertheless research-based primer on the issue of applying communications to teaching, you should consult the top rated book: *Now See Hear!: Applying communications to Teaching* by David Abbey. Available in the Profile in Practical Education, No. 9, Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto, Ontario, 74 pp. Price $2.00

World Literacy of Canada

The role of this interesting Toronto-based organization is to assist indigenous organizations throughout the world in implementing innovative functional educational programs. This includes farm management education, family life planning in health, nutrition, child care and home econ-

omics; as well as skill training; handicrafts and recreation. Most of the programs are in India, but there are others in Bangladesh and Jamaica. Programs are also planned for Botswana and Canada.

Membership fees are $10.00 per annum. Interested persons are invited to write to the head office: 692 Coxwell Ave., Toronto, Ontario, M4C 3B6, for further information.

The organization's president is Dr. James Draper; its executive director, Ron Audette.

Paul Bélanger appointed director general of ICEA

Mr. Fernand Daoust, president of Institut canadien d'éducation des adultes, announced the appointment of Mr. Paul Bélanger as director general of ICEA. Mr. Bélanger succeeds Mrs. Madeleine Joubert who has accepted the position of director of internal communications at Mouvement Desjardins. She had been directing ICEA since 1960.

RECOMMENDED READING

Generic Skills for Occupational Training, Arthur De W. Smith, Training Research and Development Station, Prince Albert, Saskatchewan. 170 pp. Price $5.46

The information contained in this publication is of direct use to those educators who are seriously concerned about the issue of relevancy in adult curricula. The methodology being developed also provides a process and instruments by which training institutions can quickly and economically determine or verify the skill content for occupational training courses.

This is the first report by TRANDS of their pilot project to determine the skills that are fundamental to the performance of tasks in a wide range of occupations. In the initial phase of this project they developed a taxonomy of basic education skills and then determined, by structured interviews of representative workers and supervisors, which of 27 sample occupations actually use those skills in job performance. The report includes the skill profiles for the occupations examined, instructional objectives for the skills found to be generic,

and a specification for the development of prescriptive training packages. The next phase of this project will include interpersonal and reasoning skills and the third phase will examine the generic manipulation skills.

The Training Research and Development Station is developing discrete training packages for the indentified skills which incorporate the individualized processes of LINC (Learning Individualized for Canadians). The package can be used in a number of ways ranging from clustering of occupations for purposes of training to the integration of basic education and occupational concepts.

Newfoundland's Individualized Adult Basic Education: Handbook for Instructors and Administrators, Newfoundland Department of Education, Division of Vocational Education, St. John, 1973.

This useful handbook has been produced and published under the direction of Wilson Brown, Supervisor of Adult Education, Newfoundland.

The book was obviously the result of an unusual co-operative effort and one that has been performed with considerable interest and enthusiasm. If for no other reason it is to be highly recommended on these grounds. However, besides this there is much of considerable value for the program developer and classroom teacher.

The handbook is divided into sections about communications skills, mathematics, science and guidance. There is also a short section on "the adult learner," an interesting historical résumé of the program and a selected bibliography.

The main sections include fairly thorough details of course content, an outline of the individualized process with its evaluation components and an explanation of how the process can best be implemented (e.g., special techniques and methods applicable and other advice for the teacher).

Like a number of other Canadian A.B.E. programs it is basically LINC oriented, and so it is firmly rooted in action research.

Readers will notice an article in this Review especially devoted to the Newfoundland science program--the first individualized science program in Canada.